

THE
PROBLEMS
OF
ARISTOTLE,
With other
PHILOSOPHERS,
AND
PHYSICIANS.

Wherein are contained di-
vers Questions, with their An-
swers, touching the estate
of mans Bodie.



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To the READER.

EVery man doth wonder (gentle Reader) at an Eclipse of the Sun, or of the Moon, and gazeth at a blazing Star, and beholdeth with admiration an exquisite picture, drawn with the pencil of a skilfull hand; yea, all Novelties do please, be they never so small. But if they be once common, be they never so great wonders, no man vouchsafeth to give them the looking on. But then as Seneca doth say, Non est Æthiopis inter suos insignitus color. The self same doth happen in man, and in the wonderfull Workmanship of his Body, and unspeakable excellency of his Soul; for if we regard his excellency, he doth surpasse all Creatures under heaven: And therefore the Egyptians being ravished with the contemplation of mans dignity and perfection, doubted not to call him a terrestriall God, and celestiaall Creature, a Messenger of the gods, Lord and Master of things below, and a familiar friend unto those which live above, a miracle of Nature, and as Seneca doth call him, Natures Darling.

It is said, That after that Phidias, a most famous Carver had made Minerva's Shield, hee engraved his own Portraiture so lively and deeply in the same, that it could never be taken out again, without the defacing of the whole work. So God himself, a farre more excellent Workman then Phidias, after he had made the universall World, and all Creatures therein, for a token of his skill, drew it anew in a small
A 2 compasse,

TO the READER.

compasse, as an abridgement of all his Works, to wit, when hee made man, who is a Microcosme, or little world, and in him printed his own image and similitude so lively, that no power whatsoever is able to blot it out. This image and similitude is the soul & understanding, which he would never have printed in man, unlesse he had first made him a Body of a substance fit and apt to receive that impression, and unlesse also he had so skilfully framed it, that it should be worthy to receive so great an ornament as the Understanding is. And therefore the body of man was made of a complexion most pure and delicate, and in shape comely and beautifull; and yet notwithstanding all these perfections which man hath in himself, few or none take delight in the study of himself, or is carefull to know the substance, state, condition, quality, and use of the parts of his own body, although he be the honour of Nature, and more to be admired then the strangest and rarest wonder that ever hapned. The cause of this is no other, but because mans nature delighteth in novelties, and neglecteth to search out the causes of those things which are common.

I have therefore thought good to give thee in a known Tongue this little Book, written by the deepest of all Philosophers, who teacheth the use of all the parts of mans body, their nature, quality, property and substance, which may bring thee in reading of it, if read it thou wilt, no lesse delight then profit, nor no lesse profit then delight. Farewell.

Fœlix qui potuit rerum cognoscere causas.

The



The first Problem.

Quest. **A**mong all living creatures, why hath man onely his countenance lifted up toward heaven?

Ans^r. Unto this question there are divers answers.

First, It proceeds from the will of the Creator's self: and although that answer be true, yet in this our purpose it seemeth not to be of force, because that so all questions might easily be dissolv'd.

Secondly, I answer, That for the most part every workman doth make his first work worse, and then his second better; and so God creating all other beasts before man, gave them their face looking down to the earth: And then secondly, he created man, as it doth appear in *Genesis*, unto whom he gave an honest shape, lifted up unto heaven. But yet this answer doth not seem to be to the purpose, because it is drawn from Divinity, and doth also derogate from the goodness of God, who maketh all his works perfect and good.

Thirdly, It is answered, That man only among all living creatures, is ordained to the Kingdom of heaven, and therefore hath his face elevated and lifted up to heaven, because that despising worldly and earthly things, he ought to contemplate on heavenly things.

Fourthly, That the reasonable soul is like unto Angels, and finally ordained towards God, as it appeareth by *Averroes* in the first *de Anima*, and therefore he hath a figure looking upward.

Fifthly, That a man is a Microcosm, that is a little world, it pleaseth *Aristotle* to say in the eighth of his *Phys.* and therefore he doth command all other living creatures, and they obey him.

Sixthly, It is answered, That naturally there is unto every thing, and every work, that form and figure given, which is fit and proper for its motion: as unto the heaven roundness, to the fire a pyramidicall form, that is, broad beneath, and sharp towards the top, which form is most apt to ascend:

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and so man hath his face up to heaven, to behold and wonder at Gods works.

Q. Why is the head of the beasts hairy?

A. The answer, according unto the opinion of *Const.* is, That the hairs are an ornament of the head, and of the brain; and the brain is purged and evacuated of grosse humours by the growing of the hair, from the highest, unto the lowest parts, which passe thorow the pores of the exterior flesh, and do become dry, and are converted into hairs. This appears to be true, because that in all mans body there is nothing drier then the hairs; for they are drier then the bones, as *Albertus Magnus* doth affirm, because that some beasts are nourished with bones, as dogs; but no beast can digest feathers or hair, but do void them undigested: and they are so dry, that they are not fit for nutriment.

Secondly, it is answered, That the brain is purged four manner of ways: First, of superfluous watry humours, by the eyes: from Melancholy, by the ears; and of Choler, by the nose: of Flegm, by the hair; and that is the intent of the Physician.

Q. Why have men longer hair on their heads then other living creatures?

A. *Arist.* 2 d. generat. anim. saith, that men have the moister brain of a'l living creatures, from the which the seed proceedeth, which is converted into the long hair of the head.

Secondly, it is answered, that the humours in man are fat, and do not become dry easily, and therefore the hair groweth long in him: in other beasts the humours are easily dried, and therefore the hair groweth not so long.

Q. Why doth the hair take deeper root in mens skin, then other living creatures?

A. Because they have greater store of nourishment in man, and therefore grow more into the inward part of man: And this is also the reason why in other creatures the hair doth alter and change with the skin, and not in man, unlesse it be sometimes a scar or wound.

Q. Why have women longer hair then men?

A. Because women are moister then men, and more flegmatic

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flegmatick, and therefore there is no matter of hair in them, and by consequence, the length also of their hairs doth follow. And furthermore, this matter is more encreased in women then in men from their interiour parts, and especially in the time of their monthly terms and flowers, because the matter doth then ascend, whereby the humour which breedeth the hair doth increase. And *Albertus* doth say, That if the hair of a woman in the time of her flowers be put into dung, a venemous Serpent is engendered of it.

The second Answer is, Because women want beards, and so the matter of the beard doth go into the matter of the hair.

Q. Why have some men soft hair, and some men hard?

A. We answer with *Aristotle*, That the hair hath proportion with the skin, of which some is hard, some thick, some subtil and soft, some grosse: therefore the hair which groweth out of a thick and grosse skin, is thick and grosse, and that which groweth of a subtil and fine, is fine and soft. And when the pores are open, then there cometh forth much humour, and therefore hard hair is engendered; and when the pores are strait, then there doth grow soft and fine hair. And this doth *Aristotle* shew in men, in whom we have an evident token, because women have softer hair then they, because that in women the pores are shut, and are strait by reason of their coldnesse.

Secondly, Because that for the most part cholerick men have harder and thicker hair then other, by reason of their heat, and because the pores are ever open in them, and therefore also they have beards sooner then others. Whereupon the Philosopher saith, that those beasts which have hard hair, are the boldest, because such hair proceedeth of heat and choler, which choler maketh men fight. *Aristotle* also giveth example in the Bear and the Boar: and contrariwise those beasts that have soft hair are fearful, because they be cold, as the Hare and Hart. *Aristotle* doth also give another reason of the softnesse and hardnesse of the hair, drawn from the Climate where a man is born; because that in hot Regions hard and grosse hair is engendered, as it

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appeareth in the Ethiopians, and the contrary is true in cold Country, as towards the North.

Q. Why have some men curled hair, and some smooth?

A. The answer is, That the cause of the curling of the hair is great abundance of heat, so that if there be much heat in a man, then the hair doth curl and grow upward. And a signe of this is proved true, Because that sometimes a man doth enter into a Bath smooth-haired, and afterward by the Bath becometh curled. And therefore the keepers of Baths have often curled hair, and also the Ethiopians and cholerick men. But the cause of the smoothnesse is the abundance of moist humours which tend downward; and a proof of this is, because women for the most part have smooth hair, because they have much humidity in them, and small heat.

Q. Why do women shew their ripenesse by the hair of their privy parts, and not elsewhere; but men in their brest?

A. We answer Physician-like, because in men and women there is abundance of humidity in that place, but more in women; because men have the mouth of the bladder in that place where the Urine is contained, of the which the hair in the brest is ingendered, and about the Navell. But of women is said, That the humidity of the bladder, and of the Matrix or Womb is joyned, and meeteth in that low secret place, and therefore is dissolved and separated in that place, through much vapours and fumes which are the cause of hair: and the like doth happen in other places where hair is, as under their arms.

Q. Why have not women beards?

A. Because they want heat, as appeareth in some effeminate men, who are beardless for the same cause, because they are of the complexion of women.

Q. Why doth the hair grow in those which are hanged?

A. Because their bodies are exposed to the Sunne, the which through his heat doth dissolve all the moisture into a fume of vapour, of which the hair doth grow and increase.

Q. Why is the hair of the beard grosser and thicker then elsewhere,

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where, and the more men are shaven, the thicker and harder it groweth?

A. Because according to the rule of the Physician, by how much the more the humour or vapour of any liquor is dissolved and taken away, by so much the more the humour remaining doth draw to the same place : and therefore how much the more the hair is shaven, so much the more the humours gather thither ; and of them the hair is engendred, and doth there also wax hard.

Q. Why are women smooth and fair in respect of men?

A. The answer is according unto *Arist. de generat. animal.* Because that in women all humidity and superfluity, which are the matter and cause of the hair of the body, is expelled with their monthly terms, the which superfluity remaineth in men, and through vapours doe passe into the hair. And a signe of this is, because women have seldom any running at the nose, or Imposthume or Ulcer, because such matter is expelled also. And we see some old women begin to have beards in their old age, that is, after forty or fifty yeers of age, when their flowers have ceased, as *Aristotle* doth teach, *de anima lib. 9.*

Q. Why doth man onely above all other creatures, wax hoary and gray, as *Protagoras* and *Aristotle* affirm?

A. The answer according unto the Philosopher, is, Because man hath the hottest heart of all living creatures ; and therefore Nature being more wise, lest a man should be suffocated through the heat of his heart, hath placed the heart which is most hot, under the brain which is most cold, to the end that the heat of the heart may be tempered with the coldnesse of the brain ; and contrariwise, that the coldnesse of the brain may be heated with the heat of the heart, and thereby there might be a temperature in both. A signe to prove this is, because that of all living Creatures man hath the worst breath, if he be come to his full age. Furthermore, man doth consume half his life in sleeping, which doth proceed of the great excesse of the coldnesse and moisture of the brain, and by that means doth want naturall heat to digest and consume that moistnesse ; the which

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which heat he hath sufficiently in his youth ; and therefore in that age is not gray , but in his old-age , when heat faileth ; and therefore the vapours ascending from the stomach remain undigested and unconsumed for want of natural heat, and then putrifie ; of which putrifaction of humours, the whiteneſſe doth follow , which is called grayneſſe or hoarineſſe. Whereby it doth appear, that hoarineſſe is nothing else but a whiteneſſe of the hair, cauſed by the putrifaction of humours about the roots of the hair, through the want of natural heat in old-age. Sometimes alſo grayneſſe is cauſed by the naughtineſſe of the complexion, which may well happen in youth : and ſometimes by reaſon of the moiſture undigested; and ſometimes through over-great fear or care, as it appeareth in Merchants, Sailers, Theeves : from whence cometh this verſe :

Cura facit canos quamvis homo non habet annos.

Q. Why doth red hair grow white ſooner then other?

A. According to the opinion of *Aristotle*, becauſe redneſſe is an infirmity in the hair ; for it is ingendered of a weak and infirm matter, that is to ſay, of a matter corrupted with the flowers of the woman ; and therefore they wax white ſooner then black hair.

Q. Why do Wolves grow griſly?

A. The better to underſtand this queſtion, note the difference between grayneſſe and griſlineſſe ; becauſe that grayneſſe is cauſed through the defect of natural heat, but griſlineſſe through devouring and eating, as *Aristotle* witneſſeth, 7 *de animal*. The Wolf being a devouring beaſt, and a great eater, he letteth it down gluttonouſly without chewing, and that at once, enough for three days ; of which meat, groſſe vapours are ingendered in the Wolves body, and by conſequence griſlineſſe. Secondly, grayneſſe and griſlineſſe do differ, becauſe grayneſſe is onely in the head, and griſlineſſe over all the body.

Q. Why do horſes grow griſly and gray?

A. According unto *Aristotle*, becauſe they are for the moſt part in the Sun : and in his opinion alſo, heat doth accidentally cauſe putrifaction, and therefore of that kinde of heat

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heat the matter of hair doth putrifie ; and by consequence, they are very quickly pill'd.

Q. Why do men become bald, and trees fall their leaves in winter ?

A. Aristotle doth give the same reason for both ; because that the want of moisture in both, is the cause of the want of the hair and of the leaves : and this is proved, because that a man becometh bald through Venery, because that lechery is a letting forth of natural humidity and heat. And so by that excesse in carnal pleasure, moisture is consumed, which is the nutriment of the hair, and therefore baldnesse doth ensue. And this is evidently proved in eunuchs and women, which do not grow bald, because they do not depart from that moistnesse. And thereupon eunuchs are of the complexion of women. But if you ask why eunuchs be not bald, nor have not the gout, as Hippocrates saith : The answer is, according unto Galen, Because the cause of baldnesse, is driness, the which is not in eunuchs, because they want their stones, the which do minister heat unto all the parts of the body ; and the heat doth open the pores, the which being open, the hair doth fall.

Q. Why are not women bald ?

A. Because they are cold and moist, which are the cause that the hair remaineth ; for moistnesse doth give nutriment unto the hair, and the coldnesse doth binde the pores.

Q. Why are bald men deceitful, according to the verse ;

Si non vis falli, fugias consortia calvi ?

A. Because baldnesse doth witnesse a cholerick complexion, which is hot and dry ; and cholerick men are naturally deceitful, according unto that verse ;

Hirsutus, fallax, irascens, produs, audax.

And therefore it followeth, *a primo ad ultimum*, that bald men are deceitful and crafty.

Q. Why are not blinde men naturally bald ?

A. Because that according unto Aristotle, the eye hath more moisture in it ; and that moisture which should passe thorow by the substance of the eyes, doth become a sufficient nutriment of the hair, and therefore they are seldom bald.

Q. Why

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Q. Why doth the hair stand an end when men are afraid?

A. Because that in time of fear, the heat doth goe from the outward parts of the body unto the inward, to the intent to help the heart, and so the pores in which the hairs are fastened, are shut up; after which stopping and shutting up of the pores, the standing up of the hair doth follow, as it is seen in brute beasts, as dogs, wild boars, and peacocks.

Of the Head.

*W*hy is a mans head round?

A. Because this figure is most fit to receive any thing into it, as *Aristotle* doth affirm *l. de Cael.* and the head doth contain in him the five senses. This is also seen in a materiall Spheer.

Q. Why is the head round?

A. *Aristotle* saith, Because it doth contain in it the moisteft parts of the living creatures; and also because the brain may be defended thereby, as with a Shield.

Q. Why is not the head absolutely long, but somewhat round?

A. To the end that the three creeks and cels of the brain might the better be distinguished; that is, the fantasie in the forehead, the discourfing or reasonable part in the middle, and the memory in the hindermost part.

Q. Why doth a man lift up his head towards the heaven when he doth imagine?

A. Because the imagination is in the forepart of the head or brain, and therefore it listeth up it self, that the creeks or cels of the imagination may be opened, and that the spirits which help the imagination, and are fit for that purpose, having their concourse thither, may help the imagination.

Q. Why doth a man when he museth, or thinketh on things past, look down towards the earth?

A. Because the cell or creek which is behinde, is the creek or chamber of memory, and therefore that looketh towards heaven when the head is bowed down, and so that cell is opened, to the end that the spirits which perfect the

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the memory, should enter in.

Q. Why is not the head fleshy, like unto the other parts of the body?

A. Because that according unto *Aristotle*, the head would be too heaue, and would not stand stedfastly; and therefore it is without flesh. Also a head loaden with flesh doth betoken an euill complexion.

Q. Why is the head subject to aches and griefs?

A. According unto *Constant.* by reason of euill humours which proceed from the stomach, and ascend unto the head, and disturb the brain, and so cause the pain in the head. And sometimes it proceeds of overmuch filling of the stomach: because that according unto the opinion of *Galen*, two great sinews passe from the brain to the mouth of the stomach, and therefore these two parts do suffer grief alwayes together. Sometimes the ach doth proceed of drinking strong wine, of fuming meats, as garlick, onions; and sometime of flegme in the stomach, whereof spring quotidian fevers.

Q. Why have women the head ach more often then men?

A. *Albertus* saith, That it is by reason of their monthly tearms, which men are not troubled with, and so a moist unclean and venemous fume is dissolved, the which seeking a passage upward, doth cause the head to ake.

Q. Why is the brain white?

A. There are two answers: The first, because it is cold, and coldnesse is the mother of white, as the Philosophers do teach. The second, because it may receive the similitude and likenesse of all colours, which the white colour can best do, because it is most simple.

Q. Why are all the senses in the head?

A. Because (as *Albertus* saith) the brain is there, of which all the senses do depend, and are directed by it, and by consequent it maketh all the spirits to feel, and by it all the members are governed.

Q. Why cannot a man escape death, if the brain or heart be hurt?

A. Because the heart and the brain are two of the principallest parts which conserue life; and therefore if they be hurt,

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hurt; there is no remedy left for cure.

Q. *Why is the brain most moist?*

A. Because it may easily receive any impression, which moisture can best do, as it appeareth in wax, which doth easily receive the print of the seal when it is soft.

Q. *Why is the brain cold?*

A. This is answered two ways. First, because that by his coldnesse it may cleer the understanding of a man, and make it subtil. Secondly, That by the coldnesse of the brain the heat of the heart may be tempered: and this is *Aristotles* intent, *lib de animal*.

Of the Eyes.

Q. *Why have we one nose and two eyes?*

A. Because our sight is more necessary for us then the smelling: and therefore it doth proceed from the goodnesse of Nature, That if we receive any hurt or losse of one eye, that yet the other should remain: Unto the which the spirit with which we see, called *spiritus visus*, is directed when the other is out, as it is plain in the common perspective.

Q. *Why have children in their youth great eyes, and why do they become smaller and lesser in their age?*

A. According to *Aristotle de generat*. it proceedeth from the great humidity of the brain, and for the same cause children are very sleepey.

Q. *Why do black eyes see well in the day time, and bad by night?*

A. According to that opinion of *Aristotle*, it proceedeth from the want of fire, and from the assembling and meeting together of light and humour in the eyes, which are lightened by reason of the Sun, which doth lighten the easie humour of the eye, and purge it; and in the absence of the Sun, those humours become dark and black, and therefore the sight not so good.

Q. *Why doth the blewish gray eyes see badly in the day time, and well by night?*

A. Because (saith *Aristotle*) graynesse is light and shining

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of it self; and the spirits with which we see, are weakned in the day-time, and strengthened in the night.

Q. Why be mens eyes of divers sorts?

A. This proceedeth, saith *Aristotle*, by reason of the diversity of humours. The eye therefore hath four coverings, and three humours. The first covering is called *Consolidative*, which is the outermost, which is strong and far. The second is called *An horny skin or covering*, to the likenesse of an horn; and that is a clear covering. The third is called *Uvea*, of the likenesse of a black grape. The fourth is called a *Cobweb*. But according unto the opinion of some, the eye doth consist of seven coverings or skins, and three humours. The first humour is called *Albugineus*, for the likenesse unto the white of an egge. The second, *Glacial*; that is like unto ice or crySTALLINE. The third, *Vitreous*; that is clear like a glasse. And that diversity of humours, causeth the diversity of the eyes.

Q. Why are men that have but one eye, good Archers? and why do good Archers commonly shut one eye? and why do such as behold the stars, look thorow a trunk with one eye?

A. This matter is handled in the Perspective Art; and the reason is, as it doth appear in the book of Causes, because that every vertue and strength united and knit together, is stronger then it self dispersed and scattered. Therefore all the force of seeing dispersed into two eyes, the one being shut, is gathered into the other; and so the light is fortified in him, and by consequence, he doth see better and certainer with one eye being shut, then both being open.

Q. Why do such as drink much, and laugh much, shed tears?

A. Because that whilst they drink and laugh without measure, the air which is drawn in doth not passe out thorow the wind pipe, and so with force is directed and sent to the eyes, and by their pores passing out, doth expel the humours of the eyes; the which humours being so expelled, do bring tears.

Q. Why do such as weep much, urine but little?

A. Because (saith *Aristotle*) the radical humidity of a tear, and of urine, are of one and the same nature. And therefore

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therefore where weeping doth increase, there urine doth diminish. And that they be of one nature is plain by the taste, because they are both salt.

Q. Why do some which have cleer eyes see nothing at all?

A. By reason of the opilation and naughtiness of the sinews with which wee see. For the Temples being destroyed, the strength of the sight cannot be carried from the brain to the eye, as the Philosopher doth teach, *lib. de sen. & sensato.*

Q. Why is the eye cleer and smooth, like unto glasse?

A. Because the things which may be seen are better beaten back from a smooth thing then otherwise, that thereby the sight should be strengthened.

Secondly, I answer, It is because the eye is very moist above all parts of the body, and of a watrish nature: And as the water is cleer and smooth, so likewise the eye.

Q. Why do men which have their eyes deep in their head, see well afar off, and the like of other beasts?

A. Because (saith Aristotle, 2. de gener. animal.) the force and power by which we see is not dispersed in them, but doth go directly unto the thing which is seen.

And this is proved by a similitude, because that when a man doth stand in a deep ditch or well, he doth see in the day time, standing in those places, the stars of the firmament, as Aristotle doth teach in his Treatise *de forma speculi*, because that then the power of the sight and the beams are not scattered.

Q. Wherefore do those men which have their eyes far out, and not deep in their heads, see but meanly, and not far distant?

A. Because (saith Aristotle) the beams of the sight which passe from the eye, are scattered on every side, and do not go directly unto the thing which is seen, and therefore the sight is weakened.

Q. Why are many beasts born blinde, as Lions whelps, and Dogs whelps?

A. Because such beasts are not as yet of perfect ripeness and maturity, and the course of nutriment doth not work in them. And this is proved by a similitude of the swal-

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lows, whose eyes, if they are taken out when they are little ones in the nest, will grow again. And this is plain in many other beasts, which are brought forth before their time, as it were dead; as Bears whelps. And this reason doth belong rather unto the perspective, then the natural Philosopher.

Q. Why do the eyes of a woman, which hath her flowers stain a new glasse? as Aristotle saith, de Somn. & Vigil. And this is the like Problem, Why doth a Basilisk kill a man with his sight?

A. To the first the answer is, That when the flowers do run from a woman, then a most venomous air is dissolved in them, the which doth ascend unto the womans head; and she having grief of her head, doth cover it with many veils and kerchiefs: and because the eyes are full of small unsensible holes, which are called pores, there the air seeketh a passage, and so doth infect the eyes, which are full of blood. And their eyes do also appear dropping, and full of tears, by reason of the evil vapour that is in them: and those vapours are incorporated and multiplied until they come unto the glasse before them: and by reason that such a glasse is very sound, clear and smoothe, it doth easily receive that which is unclean.

To the second it is answered, That the Basilisk is a very venomous and infected beast, and that there passe from his eyes venomous vapours, which are multiplied unto the thing which is seen by him, and even unto the eye of man: the which venomous vapours or humours entring into the body, do infect him, and so in the end the man dieth. And this is also the reason why the Basilisk looking upon a shield perfectly wel made with fast clammy pitch, or any hard smoothe thing, doth kill himself, because the humours are beaten back from this smoothe hard thing unto the Basilisk; by which beating back he is killed. And the like is said of a woman when she hath her monthly disease: wherey followeth, that some old women do hurt themselves, they look upon glasses, or other firm and solid things, the time of their terms.

Q. Why is not the sparkling of cats eyes and mules eyes seen in the light, but in the dark?

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A. Because that the greater light doth darken the lesser, and therefore in a greater light that sparkling cannot be seen: but the greater the darknesse is, the easier it is seen, and is made more strong and shining, because it is not then hindered by a greater external light which might darken it.

Q. Why doth a man beholding himself in a glasse, presently forget his own disposition?

A. The answer is made in *lib. de forma speculi*, That the image seen by the glasse doth represent it self weakly and indirectly to the power of the sight: and because it is represented weakly, it is weakly also apprehended, and by consequence it is not long retained.

Q. Why is the sight recreated and refreshed by a green colour, as this verse doth shew?

Fons, speculum, gramen oculis sunt alleviament.

A. Because the green colour doth meanly move the instrument of the sight, and therefore doth comfort the sight: but this doth not black nor white colours, because these colours do vehemently stir and alter the organ and instrument of the sight, and therefore make the greater violence: but by how much the more violent the thing is which is felt or seen, the more it doth destroy and weaken the sense as *Aristotle* doth teach, *lib. 2 de animal.*

Of the Nose.

VVhy doth the nose stand out further then the other parts of the body?

A. There are two answers. The first, because the nose is as it were the sink of the brain, by the which the flegme of the brain is purged; and therefore it doth stand so forth, lest the other part should be defiled. The second (according unto *Constant.*) because the nose is the beauty of the face, and therefore it shew it self and shine. It doth smell also and adorn face, as *Boetius* saith, *de discipl. Schol.*

Q. Why hath man the worst smell of all other living creatures as it doth appear, *lib. 2 de animal.*?

A. Because that man (as the Commentator saith) in respect of

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spect of his quantity, bath the most brain of all creatures. And therefore by that exceeding moistnesse and coldnesse, the brain wanteth a good disposition, and by consequence the smelling, seeing the instrument is not good, as *Aristotle* and *Themistocles* do teach. Yea, some men there be which do not smell at all.

Q. Why doth the Vulture or Cormorant smell very well, as the Commentator doth say?

A. Because they have a very dry brain; and therefore the air carrying the smell, is not hindered by the humidity of the brain, but doth presently touch his instrument. And therefore he saith, That the Vultures, Tygres, and other beasts, came five hundred miles to the dead bodies after a battel in Greece.

Q. Why did Nature make the Nostrils?

A. For three commodities. First, because that the mouth being shut, we draw breath in by the nostrils, to refresh the heart with. The second commodity is, because that the air which proceedeth from the mouth, doth savour badly, because it doth savour of the vapours which rise from the stomach; but that which we breathe from the nose, is not so noisome. The third, because the flegme which doth proceed from the brain, is purged by them.

Q. Why do men sneeze?

A. Because that the expulsive vertue or power, and the sight, should thereby be purged; and the brain also from superfluities: because that as the Lungs are purged by coughing, so the sight and the brain by sneezing; and those which sneeze oft, are said to have a strong brain: and therefore the Physitians give sneezing-medicaments to purge the brain: and such sick persons as cannot sneeze, die quickly, because it is a signe that their brain is wholly stuffed with evil humours which cannot be purged.

Q. Why do not such as are apoplectick, sneeze; that is, such as are subject easily to bleed?

A. Because the passages and ventricles of the brain are stopped in them: and if they could sneeze, their apoplexy would be loosed.

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Q. Why doth the heat of the sun provoke sneezing, and not the heat of the fire?

A. Because the heat of the sun doth onely dissolve, and not consume, and therefore the vapour dissolved is expelled by sneezing: but the heat of the fire doth dissolve and consume, and therefore doth rather consume sneezing then provoke to it.

Of the Ears.

*W*HY do all beasts move their ears, and not man?

A. Because there is a certain muscle neer unto the jaw, which doth hinder motion in the ear, and therefore that muscle being extended and stretched, men do move their ears, as it hath been seen in divers men: but all beasts want that muscle or fleshy sinew, and therefore do move their ears.

Q. Why is rain prognosticated by the pricking up of the asses ears?

A. Because the asse is a very melancholy beast, and it proceedeth from melancholy that he doth foresee rain to come. In the time of rain all beasts do prick up their ears, and therefore the asse perceiving that it will rain, doth prick up his ears before it come.

Q. Why have some beasts no ears?

A. Aristotle doth answer, and say, that nature doth give unto every thing that which is fit for it: But if she should have given birds ears, their flying would have been hindered by them. Likewise fish do want ears, because they would hinder their swimming; and have onely certain little holes thorow which they do hear, as Aristotle doth declare by the sea-calf.

Q. Why have bats ears, seeing they seem to be birds?

A. Because they are partly birds in nature, in that they do flie, by reason whereof they have wings; and partly they are of the nature of four-footed beasts, and in that respect they are hairy, because they are mice; and therefore nature, as being wise, gave them ears.

Q. Why hath onely man round ears?

A. Because the shape of the whole and of the parts should be

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be proportionable, and especially in things of one nature : for as a drop of water is round, so the whole water, as *John de sacro Bosto* doth prove. And so because a mans head is round, the ears incline towards the same figure : but the heads of beasts are somewhat long, and so their ears are drawn into length also.

Q. Why did nature give living creatures ears ?

A. For two causes. First, because that with them they should hear. Secondly, because that by the ears cholerick superfluity is purged : for as the head is purged from flegmatick superfluity by the nose, so from cholerick by the ears.

Of the Mouth.

*W*hy hath the mouth lips to compasse it ?

A. According unto *Const.* because the lips do cover and defend the teeth : for it were unseemly that the teeth should always be seen. Another answer is, that the teeth are of a cold nature, and would therefore be easily hurt, if they were not covered with the lips. Another moral reason is, because a man should not be too hasty in speech.

Q. Why hath a man two eyes, and two ears, and but one mouth ?

A. Because a man should speak but little, and see and hear much. And withal *Aristotle* doth say, that the hearing is the sense with which learning is gotten. And he saith, that the sight doth shew us the difference of many things. And *Seneca* doth agree unto this, affirming, that Nature hath environed the tongue with a double cloister, the teeth and lips, and hath made the ears open and wide ; and hath given us but one mouth, to speak little, though we hear much.

Q. Why hath a man a mouth ?

A. For many commodities. First, because the mouth is the gate and door of the stomach. Secondly, because the meat is chewed in the mouth, and prepared and made ready for the first digestion : although *Avicen* doth hold that the first digestion is made in the mouth. Thirdly, because that the air drawn into the hollow of the mouth for the refreshing of the heart, is made more pure and subtil. And for many other causes, which shall hereafter appear.

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Q. Why are the lips moveable?

A. Because of forming the voice and words, which cannot be perfectly done without them. For as without *a, b, c,* there is no writing; so without the lips no voice can well be formed.

Q. Why do men gape?

A. The glosse upon the last part of *Hippocrates Aphorisms* saith, that it proceedeth of wearisomnesse, as when a man sitteth among such as he doth not know, whose company he would willingly be rid of. Secondly, gaping is caused of the thick fumes and vapours which fill the jaws, by the expulsion of the which is caused the stretching out and extension of the jaws, and opening of the mouth, which is called gaping.

Q. Why doth a man gape when he seeth another man gape?

A. This proceedeth of the imagination. And this is proved by a similitude; for an asse is *animal valde sensibile*, by reason of his melancholy, because he doth retain his superfluity a long time, and would neither eat nor pisse, unlesse he should hear another pisse. And so a man doth gape through imagination when another man doth gape.

Of the Teeth.

W*Hy do the teeth onely, among all other bones, feel with the sense of feeling?*

A. Because (as *Avicen* and *Galen* do say) they might discern of heat and cold, which hurt them; which other bones need not.

Q. Why have men more teeth then women?

A. By reason of the abundance of heat and blood, which is more in men then in women.

Q. Why do teeth grow unto the end of our life, and not the other bones?

A. Because otherwise they should be consumed with chewing and grinding.

Q. Why do teeth onely come again when some fall or be taken out, and other bones taken away grow no more?

A. Because that, according unto *Aristotle*, all other bones

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are ingendered of the humidity which is called radical, and so they breed in the womb of the mother : but the teeth are ingendered of nutritive humidity, which is renewed and increased from day to day.

Q. VVhy do the fore-teeth fall in youths, and grow again, and not the cheek-teeth ?

A. This proceedeth of the defect of matter, and of the figure, because the fore teeth are sharp, and the others broad. But according unto *Aristotle*, there is another answer, that is, that it is the office of the foreteeth to cut the meat, and therefore they are sharp ; and the office of the others is to chew the meat, and therefore they are broad in fashion, which is fittest for that purpose.

Q. VVhy do the foreteeth grow soonest ?

A. Because we want them sooner in cutting, then the other in chewing.

Q. Why do the teeth grow black in the old age of living creatures?

A. This proceedeth of the corruption of the meat, and the corruption of flegme, with a naughty cholerick humour.

Q. VVhy are colts teeth yellow, and of the colour of Suffron, when they be young, and wax white when they be old ?

A. *Aristotle* saith, that a horse hath abundance of watry humours in him, the which in his youth are digested and converted into grosnesse ; but in old age heat is diminished, and the watry humours remain, whose proper colour is white.

Q. VVhy did Nature give living creatures teeth ?

A. *Aristotle* saith (*lib. de generat. animal.*) to some to fight with, and for the defence of their life ; as unto wolves and boars : unto some to eat with, as unto horses : unto some for the forming of their voice, as unto men it appeareth by the *Commentator* in the books *de animal.*

Q. VVhy do horned beasts want their upper cheek-teeth ?

A. According unto *Aristotle* in his book *de animal.* horns and teeth are caused of the self same matter, that is, of nutritive humidity ; and therefore the matter which passeth into horns turneth not into teeth, and therefore the upper teeth want. And such beasts according to *Aristotle*, cannot chew well ; whereupon for want of teeth they have two stomacks

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sticks by consequence, and so do chew their meat twice and they do first convey the meat into the first stomach or belly, and then return it from whence it came, and chew it.

Q. Why are some creatures brought forth with teeth, as kids and lambs; and some without, as men?

A. Nature doth not want in things necessary, nor abound in things superfluous; and therefore because these beasts not long after they be fallen do need teeth, are fallen with teeth: but men are nourished with the mothers dug for a time, and therefore for a time want teeth.

Q. Why have not birds teeth?

A. Because the matter of teeth passeth into their beak, and therefore there is their digestion: or else it is answered, That although they do not chew with teeth, yet their heat in digestion doth supply the want of teeth.

Of the Tongue.

W*hy is the tongue full of pores?*

A. According unto Aristotle de anima, because the tongue is the mean whereby we taste, and through the mouth in the pores of the tongue, the taste doth come into the sense of tasting. Otherwise it is answered, That a frothy spittle is sent into the mouth by the tongue from the Lungs, moistening the meat, and making it ready for the first digestion: and therefore the tongue is full of pores, because this spittle may have passage thorow it.

Q. Why doth the tongue of such as are sick of agues, judge all things bitter?

A. Because the stomach of such persons is filled with choleric humours; and choler is very bitter, as it appeareth by the gall: and therefore this bitter fume doth infect the tongue, and so the tongue being full of these tastes, doth judge them bitter; although the bitterneffe be not in the meats, but in the tongue.

Q. Why doth the tongue water when we hear sowre and sharp things named?

A. Because the imaginative vertue or power is of greater force then the power and faculty of tasting: and when we imagine

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twice : imagine of a taste, we conceive it by the power of tasting, as
back on by a mean : and because there is nothing felt by taste, but by
ew it. the mean of that spittle, therefore then the tongue doth water.

in kids *Q. Why do some stammer, and some lisp ?*

bound *A.* This happeneth for many causes. Sometimes through
beasts the moistnesse of the tongue and brain, as in children, which
n with cannot speak plainly, nor pronounce many letters. Some-
for a times it happeneth by reason of the shrinking of certain fi-
news which are corrupted with flegm : for such sinews there
be which go to the tongue.

k, and *Q. Why are the tongues of serpents and mad dogs venomous ?*

vered, *A.* Because of the malignity and fumosity of the venom-
eat in ous humour which doth predominate in them.

*Q. Why is a dogs tongue fit and apt for medicine, and contrari-
wise an horses tongue pestiferous ?*

A. This is by reason of some secret property; or else it may
be said that the tongue of a dog is full of many pores, & so doth
draw and take away the viscosity of the wound. Some say that
a dog hath by nature some humours in his tongue, with the
which by licking he doth heal: and the contrary is in a horse.

Q. Why is spittle white ?

A. By reason of the continual moving of the tongue,
whereof heat is ingendered, which doth make white this su-
perfluity which is spittle, as it is seen in the froth of water.

Q. Why is spittle unsavoury, and without taste ?

A. If it had a certain determined taste, then the tongue
would not taste at all, but should onely have the taste of spit-
tle, and so could not receive other tastes.

Q. Why doth the spittle of one that is fasting heal an imposthume ?

A. Because (according to Avicen) it is well digested,
and made subril.

Q. Why do some abound in spittle more then others ?

A. This doth proceed of a flegmatick complexion, which
doth predominate in them : and therefore the Physitian doth
say, That such should take heed of a quotidian Ague, which
ariseth of the predomination of flegm. The contrary in
those which spit little, because heat doth abound in them,
which doth consume the humidity of spittle ; and so the
defect of spittle is a signe of a Fever.

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Q. *Why is the spittle of a man which is fasting, more subtil then of one who is full?*

A. Because that that spittle is without the viscosity of meat, which is wont to make the spittle of one who is full grosse and thick.

Q. *From whence proceedeth the spittle of man?*

A. From the froth of the Lungs, which, according unto the Physitians, are the seat of flegme.

Q. *VVhy are such beasts which often go together for generation, very full of fume and froth?*

A. Because that then the Lights and the Heart are in a great motion of lust, and therefore there is ingendered in them much frothy matter.

Q. *VVhy have not birds spittle?*

A. Because they have very dry Lungs, according unto Aristotle, in his fifth book de animal.

Q. *Why do such as are called Epileptici, that is, such as are overwhelmed, and as it were drowned in their own blood, and are diseased, savour badly and corruptly?*

A. The answer, according unto the Physitians, is, because the peccant matter lieth in his head: but if he do vomit, then the matter is in the stomach; but if he urine much, then the matter is in the passage of the urine; but if they begin to have seed, then it is in the vessels of the seed; and according unto this the Physitians do purge them.

Q. *VVhy doth the tongue lose sometime the use of speaking?*

A. The answer is out of Hippocrates, that this doth happen through a Palsie or Apoplexie, that is, a sudden effusion of blood, and of a grosse humour. And sometimes also by the infection *Spiritus animalis* in the middle cell of the brain, which doth hinder that the spirit is not carried unto the tongue: and this is Galens meaning; for by the expressing of the tongue, many actions of divers passions are made manifest

Of the roof of the Mouth.

W*Hy are the fruits before they be ripe, of a naughty relish, or bitter, and after sweet?*

A. A naughty relish in tast proceedeth of coldnes, and want of heat in grosse & thick humidiry; but a sweet taste proceed-

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eth of a sufficient heat, and therefore in the ripe fruit the humidity is subtil through the heat of the Sun, and therefore such fruits are commonly sweet: but before they be ripe, the humidity is grosse and subtil, for want of heat, and therefore then the fruits are bitter and sowe.

Q. Why be we rather delighted with sweet tastes, then with bitter, or any other?

A. Because nature is delighted with sweetnesse. The reason is, because a sweet thing is hot and moist, & through his heat it doth dissolve and consume superfluous humidities, and by this humidity immundicity is washed away: but a sharp eager tast, by reason of the cold which doth predominate in it, doth binde over-much, and prick, and offend the parts of the body in purging. And therefore we do not delight in that taste, because the Physicians counsel us to eat nothing which is bitter in the summer, nor in a great heat: and the reason is, because bitternesse doth breed heat; but we should eat bitter things in winter onely. And therefore *Aristotle* doth say that sweet things are grateful unto nature, and do greatly nourish.

Q. Why doth a sharp taste, as of vinegar, prouoke appetite rather then any other?

A. Because it is cold, and doth cool. Now it is the nature of cold to desire and draw, and therefore is cause of appetite. Mark that there are nine kindes of tastes: three which proceed from heat, three from cold, and three from a temperate mean.

Q. Why do we draw in more air then we breathe out?

A. *Arist.* and *Albertus* in his book *de motu cordis*, do answer, that much air is drawn in, and is turned into a nutriment, and with the vital spirits is contained in the lungs. And therefore a beast is not suffocated so long as he receiveth air with the lungs, in which some part of the air remaineth also.

Q. Why doth the air seem to be expelled, and put forth, seeing that indeed the air is invisible, by reason of its rarity and thinnesse?

A. Because the air which is received into us, is mingled with vapors and fumosity of the heart, by reason whereof it is made thick, and so is seen. And this is proved by experience, because that in winter we see our breath, because the coldnesse of the air doth binde the breath mixed with fumosities, and

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and so it is thickened and made grosse, and by consequence it is seen.

Q. Why have some men stinking breath?

A. The answer is, according unto the Physicians, because there do arise evil fumes from the stomach; and sometimes it doth proceed of the corruption of the airy parts of the body, as of the Lungs. And the breath of lepers is so infected, that it doth poison the birds which are neer unto them; because the inward parts are very corrupt, as appeareth by *Const. de fin.* because that leprosie is a nourishment of all the parts of the body, together with a corrupting of them: and it doth begin in the blood, and the exterior members of the body,

Q. Why be lepers hoarse?

A. Because in them the instruments vocal are corrupted, that is, the Lights.

Q. Why do men become hoarse?

A. Because of the rheum descending from the brain, filling the conduits of the Lights: or sometimes through some imposthumes in the throat, or rheum gathered in the neck.

Q. Why have the females of all living creatures the shrillest voice, a Crow only excepted; and a woman shriller then a man, & a smaller?

A. According unto Aristotle, by reason of the composition of the veins and vocal arteries, that is, when the air doth enter in; by which veins and arteries the voice is formed, as appeareth by a similitude, because a small pipe doth sound shriller then a great. And so also in women, because the passage where the voice is formed is made narrow and strait by reason of cold, because it is the nature of cold to bind. But in men that passage is open and wider through heat, because it is the property of heat to open and dissolve. And it proceedeth in women through the moistnesse of the Lungs, and weaknesse of heat. Young men, and diseased, have sharp and shrill voices for the same cause. And this is the natural cause why a man-childe at his birth-time doth cry *a, i*, which is a bigger sound; and the female *e*, which is a slender sound; as it pleaseth *Laertius*, when he saith, *Musculus a profert*.

Q. Why doth the voice change in men and women; in men at 14; in women at 12: in men, when they begin to yeeld seed; in women, when their breasts begin to grow; Aristotle doth say, lib. de animal?

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A. Because then, saith *Aristotle*, the beginning of the voice is slackned and loosed: and he proveth this by a similitude of a string of an Instrument let down or loosed, which gives a great sound. And he proveth it another way, because beasts which are gelded, as capons, eunuchs, and gelded men, have softer and slenderer voices then others, by reason they want stones.

Q. Why do men become hoarse by the looking on a wolf?

A. The answer (according unto *Aristotle*) is, because a wolf is a very cold beast in the brain, & thereupon hath a very heavy head: if then the spirit of the sight or beams be directed and go towards the wolf, it doth draw some coldnesse from him to the brest, and then of that coldnesse the brest is straitned, where the instruments are by which the voice is formed, because a wolf cannot send forth any other fumosities; and they being breathed out into the air, the air next unto him is infected, and the next air by that air, and so another air, until it come to the man, and so doth make him hoarse by closing the vocal artery or wind-pipe. And it hath been already said, That a wolf is a very ravenous and devouring beast, & doth eat as much at once as will serve him for three days; and therefore by opening his mouth doth cast forth raw and grosse humours undigested, by the which the next air unto him is infected, and so the next unto it, until it come to the looker on, and so doth infect like the Basilisk, which doth cast forth venomous airs, which infect men by the eyes.

Q. Why is not a wolf hoarse when a man doth look on him?

A. Because a man is not so cold as a wolf, nor of so malignant a quality. And for the like reason this Problem is moved.

Q. Why doth a man which is slain, bleed when he is seen of him which killed him?

A. This proceedeth of a divine cause, and not of a natural; because this blood doth call for revenge against the murderer. But if there be any natural cause of it, this is it: The committer of this wicked fact calling it to mind, is very sorry for it, and repenteth him of it, and is in anguish of mind, and in a great heat, through the strong imagination which he hath conceived, and by that means all his spirits do stir and boil, and repair unto the instrument of the sight, and so go out by the

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the beams of the sight of the eyes, unto the wounds which are made, the which if they be fresh, do presently fall a bleeding. Secondly, this is done by the help of the air which is breathed in, the which being drawn from the wound, causeth it to bleed.

Q. Why do the small birds sing more and louder then great ones, as appeareth in the Lark and Nightingale?

A. Because the spirits of small birds are subtil and soft, and the organ or conduits strait, as appeareth in a pipe, and therefore follow easily any desire, and so do sing very soft.

Q. Why doth the male sing more then the female, as it appeareth in all living creatures?

A. It proceedeth from the desire of carnal copulation, because that then the spirits are moved thorowout all the body with the foresaid appetite and desire. And, speaking generally, the females are colder then the males.

Q. Why do bees, wasps, flies, and locusts, and many other such like beasts, make a noise, seeing they have no lungs nor instruments of the voice?

A. According unto *Aristotle*, there is in them a certain small skin, the which when the air doth strike, it causeth the sound, and therefore there is a strange sound.

Q. Why do not fish make a sound?

A. Because that according unto *Aristotle*, they have no Lights, but onely Gills; nor yet a Heart, and therefore they need not the drawing in of air, and by consequence they make no noise, because that as *Aristotle* doth say, a voice is a percussion of the air which is drawn.

Of the Neck.

V*Why hath a living creature a neck?*

A. Because the neck is the supporter of the head, as *Aristotle* doth teach; and therefore the neck is the middle between the head and the body, to the intent that by it, and by his sinews, as by certain means and ways, motion and sense of the body might be conveyed thorowout all the body; and that by means of the neck, as it were by a distance, the heart, which is very hot, might be separated from the brain.

Q. Why do some beasts want necks, as serpents and fishes?

A. Because such beasts want a heart, and therefore they do

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do want that distance which we have spoken of: or else we answer, that they have a neck in some inward part of them, but it is not distinguished outwardly from the heart and the head.

Q. Why is the neck full of bones and joynts?

A. Because it may bear and sustain the head the stronger, And also because the back-bone is joynted to the brain in the neck, and from thence it receiveth marrow, which is of the same substance with the brain.

Q. Why have some beasts long necks; as Cranes, Storks, and such-like?

A. Because such beasts do seek their living in the bottom of the water, and therefore do want such necks: and some beasts have short necks, as Sparrow-hawks, because such are ravenous beasts, and therefore for strength want such long necks; as it doth appear in the Ox, which hath a short neck, and therefore strong.

Q. Why is the neck hollow, and especially before, about the tongue?

A. Because there be two passages, whereof the one doth carry the meat unto the nutritive instrument, as to the stomach and liver, and is called of the Greeks *Oesophagus*; and the other is the wind-pipe.

Q. Why is the artery made like rings and circles?

A. The better to bow, and give a good sounding again.

Q. Why doth a chicken move a great space after his head is off, and a man beheaded never stirreth?

A. Because a chicken, and such-like, have straight sinews and arteries, and therefore the spirit of moving continueth long after the head is off: but men, and many beasts, have long and large sinews and arteries, and therefore the motive spirits do quickly depart from them, and so by consequence cannot move their bodies.

Of the Shoulders and Arms.

VV *Hy hath a man shoulders and arms?*

A. To give and carry burdens, according to *Aristotle.*

Q. Why are his arms round?

A. For the swifter and speedier work, because that figure is fit to move.

Q. Why

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Q. *Why are his arms thick?*

A. Because they should be strong to lift and bear burdens to thrust, and give a strong blowe : so their bones are thick because they contain much marrow , for fear they should be easily corrupted and marred : but marrow cannot so well be contained in small bones as in great.

Q. *Why do such as are diseased and in grief, uncover and cover their arms ; and such also as are in an agony ?*

A. Because such are neer unto death ; and it is a signe of death, by reason of great grief , which causeth that uncovering, as Hippocrates doth teach, lib. prognost.

Q. *Why do the Arms become small and slender in some sickness, as in mad-men, and such as are sick of the dropsie ?*

A. Because all the parts of the body do suffer the one with the other ; and therefore one member being in grief, all the humors do concur & run thither, to give succour and help to the aforesaid griefs. For when the head doth ake, all humours of the arms do run to the head ; and therefore the arms become small and slender, because they want their proper nutriture.

Q. *Why have brute beasts no arms ?*

A. Their fore-feet are in stead of arms, and in their place. Or else we may answer more fitly , Because all beasts have some parts for their defence, and to fight with ; as the wolf, his teeth ; the cow, her horn ; a horse, his hinder feet ; birds, their beak and wings : but onely man hath his arms.

Of the Hand.

W*hy hath a man hands ; and an ape also, which is like unto a man ?*

A. The hand is an instrument which a man doth especially want, because many things are done by the hands, and not by any other part, as Aristotle doth teach.

Q. *Why are some men ambo-dexters, that is, use the left hand as well as the right ?*

A. By reason of the great heat of the heart, and for the hot blowing of the same ; for that it is which maketh a man as nimble of the left hand as of the right : and without doubt such are of good complexion.

Q. *Why are not women ambo-dexters as well as men, as Hipp.*
ult. part. Aphoris.

A. Be.

A. Because, as *Galen* saith, a woman in health which is most hot, is colder then the coldest man in health; I say, in health; for if she have an ague, she is accidentally hotter then a man.

Q. Why are the fingers full of joynts?

A. To be the more fit and apt to receive, and to keep the things received.

Q. Why hath every finger three joynts, and the thumb but two?

A. The thumb hath three, but the third is joynted unto the arm, and therefore is stronger then the other fingers; and is bigger in strength, seeing he is also in quantity, and is called *Pollex à polleo*, that is, to excel in strength.

Q. Why are the fingers of the right hand more nimble then the fingers of the left, as *Ægidius* saith?

A. It proceedeth from the heat which doth predominate in those parts, which causeth great agility.

Q. Why are the fingers thicker before meat then after, as *Albertus* saith?

A. According to the Physicians, because a man which is fasting is full of bad humours, and divers fumosities, which puff up the parts of the body, and the fingers also: but when those humours are expelled through meat, the fingers become more slender. And for the same reason, a man which is fasting is heavier then when he hath meat in his belly, as is most plain in fasters. Another reason may be given; that is, because that after meat the heat departeth from the outward parts of the body unto the inward, to help digestion; and therefore the outward and external parts become slender: but after the digestion is made, the blood runneth again to the exteriour parts, and then they become great again.

Q. Why are some men left-handed?

A. Because the heart sendeth not heat unto the right side, but more unto the left, and doth also work a slendernesse and subtilty in the left side.

Of the Nails.

From whence do the nails proceed?

A. Of fumosity and humours, which are resolved, and go into the extremities of the fingers, and there are dried through the power of the external air, and brought to the hardnesse of a horn.

Q. Why do the nails of old men grow black and pale?

A. Because the heat of the heart decayeth, the which decaying, their beauty decayeth also.

Q. Why are men judged to be of good or evil complexion by the disposition of their nails?

A. Because they give witness of the goodnesse or badnesse of the heart, and therefore of the complexion: for if they be somewhat red, they betoken choler well tempered: but if they be inclined with red somewhat to blacknesse, they betoken a sanguine complexion: but if they be yellowish or black, they signifie melancholy.

Q. Why do white spots appear in the nails?

A. Through the mixture of flegme with the nutriment.

Of the Brest.

Why is the brest hollow?

A. Because there is the seat of the spiritual and aërial members, which are most noble, as the heart and lights, and therefore because these might be kept from hurt, it was necessary that the brest should be hollow.

Q. Why hath a man the broadest brest of all living?

A. Because the spirits of man are weak and subtil, and therefore do require a spacious place wherein they are contained, as the brest is.

Q. Why are the brests of birds round?

A. Because they be in continual motion, and that figure is fittest for motion, as Aristotle saith, 4 Phys.

Q. Why do we draw those things which we love, unto our brest?

A. Because the first and chiefest part of the heart is under the brest; and therefore that which the heart doth love, we draw to the brest, by reason of the neighbourhood it hath with the heart, so applying the thing loved unto the lover.

Q. Why have women narrower brests then men?

A. Because there is heat in men, which doth naturally move to the uppermost part of them, making those parts great and large. And therefore a great brest is a token of courage, as Aristotle saith, declaring this to be true by the lion and the bull: But in women cold predominateth, which naturally tendereth downward. And therefore Aristotle saith, that women oft fall

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in their tail, because those parts behinde are grosse and heaue,
by reason of the cold descending thither: but a man commonly
alleth on his brest, by reason of its greatnesse and thicknesse.

Of the Paps and Dugs.

VVhy are the paps placed upon the brest?

A. Because the brest is the seat of the heart, which
is most hot; and therefore there the paps do grow, to the end
that the flowers being conveyed thither, as being neer to the
heart of the heart, should the sooner be digested and perfected,
and converted into the matter and substance of milk.

Q. Why are the paps belowe the breasts in beasts, and above the
brest in women?

A. Because a woman goeth upright, and hath two legs onely;
and therefore if her dugs should be below her brest, they would
hinder her going: but beasts have four feet, and therefore
they are not hindered in their going.

Q. VVhy have not men as great breasts and paps as women?

A. Because a man hath no monthly terms, and therefore no
vessel deputed for them. And yet Aristotle saith that men have
small paps, and women little small stones.

Q. Which paps are best for children to suck, great ones, or little
ones, or the mean between both?

A. In great ones the heat is dispersed, and there is no good
digestion of the milk; but in small ones the power and force is
strong, because a vertue united is strongest, and by consequence
there is a good working and digesting of the milk; and there-
fore the small ones are better then the great ones: but yet the
mean ones are the best of all, because every mean is best.

Q. VVhy do the paps of young women begin to grow great about
thirteen or fourteen yeers of age, as Albertus saith?

A. Because that then her terms begin to have course and
increase: and as Aristotle saith, mens seed and womens flow-
ers begin to increase at one age.

Q. Why do the paps of such women as cast their childe, wax soft;
as Hippocrates saith, part. 2. Aphor.

A. Because there the flowers have no course to the teats, by
which the young one is nourished, but follow their ordinary
course, and therefore they wax soft.

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Q. Why hath a woman that is with childe with a boy, the right pap harder then the left?

A. Because the male-childe is conceived in the right side of the mother, as Hippocrates saith, and therefore the flowers do run to the right pap, and make it hard.

Q. Why doth it shew weaknesse of the childe, when the milk doth drop out of the paps before the woman be delivered?

A. According to Aristotle, because the milk is the proper nutriment of the childe in the womb of the mother, and therefore if the milk run out, it is a token that the childe is not nourished, and therefore is weak.

Q. Why doth the hardnesse of the paps betoken the health of the childe in the womb?

A. Because the flowers are converted into milk, and that milk doth sufficiently nourish the childe, and thereby the strength is signified.

Q. Why hath a woman but two paps, and some brute beasts ten, or more?

A. Because, for the most part, a woman hath but one childe, either boy or wench, and therefore one pap is sufficient, or two: but beasts having many young ones, therefore so many teats.

Q. Why be womens paps hard when they be with childe, and soft at other times?

A. They swell then, and are puffed up, because the much moisture which proceedeth from their flowers, doth run into the paps, which at other seasons remaineth in the matrix or womb, and is expelled by the place deputed to that end.

Q. By what means doth the milk of the paps come to the matrix or womb?

A. According to Hippocrates, because there is a certain knitting and coupling of the paps with the womb; and there are certain veins which the Midwives do cut in the time of the birth of the childe, and by those veins the milk doth flow in at the navel of the children, and so they receive nutriment by the navel. Some say that the childe in the womb is nourished at the mouth: but that is false, because that so he should void excrements also: but that is false, because it is not seen where.

Q. Why is it a signe of a male-childe in the womb, when the milk

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that runneth out of the womans brest is thick, and not much; and of female, when it is thin.

A. Because a woman that goeth with a boy, hath great heat in her, which doth perfect the milk, and make it thicker: but such as go with a wench, have not so much heat, and therefore the milk is undigested and unperfected, and watry and thin, and will swim above water if it be put into it.

Q. Why is the milk white, seeing the flowers are red which it is ingendered of?

A. Because blood that is well purged and concocted, becometh white; as appeareth in flesh, whose proper colour is red, and being well boiled, is white. Another answer is, because every humour which is ingendered in such a part of the body, is made like unto that part in colour where it is ingendered, is neerer as it can be: but because the flesh of the paps is white, therefore the colour of the milk is white.

Q. Why doth a cow give milk more abundantly then other beasts?

A. Because she is a great eating beast: and where is much monthly superfluity ingendered, there is much milk, because it is nothing else but that blood purged and tried: and because a cow hath much of this monthly blood, she hath much milk.

Q. Why is not milk wholesome? as Hippoc. saith, part. 2. Aphor.

A. According to the opinion of Galen, for divers reasons. First, because it doth curd in the stomach, whereof an evil breath is bred. But to this Hippocrates giveth a remedy, saying, if the third part of it be mingled with running water, then it is not hurtful. Another reason is, because sometimes the milk doth wax sowre in the stomach, and boil till it be dry, whereof evil humours are bred, which do infect the breath.

Q. Why is milk naught for such as have the head ake?

A. Because milk is easily turned into great fumosities, and hath much terrestrial substance in it; the which fumosities ascending, doth cause the head to ake.

Q. Why is milk a fit nuriment for children and infants?

A. Because it is a natural and usual food: and because they were nourished with the same in the womb of the mother, it is fit for them.

Q. Why are the white meats made of a new-milch cow, good?

A. Because the milk at that time is very spongie, and doth

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expel many fumosities, and doth as it were purge at that time

Q. VVhy is the milk naught for the childe, if the woman use carnal copulation?

A. Because that in the time of carnal copulation, the subtlest and best part of the milk goeth to the vessels of the seed, and to the womb, and the worst remaineth in the paps, which doth hurt the childe.

Q. VVhy is the milk of brown women better then of white women?

A. Because brown women are hotter then others, and because the heat doth purge the milk sufficiently, and so the milk is the better.

Q. VVhy do the Physitians forbid us to eat fish and milk at the same meal?

A. Because they do dispose us to a leprosie, and because they are both flegmatick.

Q. VVhy have not birds milk and paps?

A. Because paps would hinder their flying; and fish also have neither paps nor milk, as *Aristotle* saith. But in fish, the female doth cast much spawn, upon which the male toucheth with his small gut, which causeth their kind to be infinite in succession.

Of Backs,

VVhy have beasts backs?

A. According to *Aristotle*, for three causes. First, because the back should be the way and mean of the sinews, which are extended and spread thorowout all the body from the back-bone, as it appeareth in such as are hanged, because that when they are torn in pieces, or without flesh, the sinews hang whole in the chine or back-bone. The second, because it should be a guard and defence for the soft parts of the body, as of the stomach, liver, lights, and such-like. The third, because it should be the foundation of all the bones, because we see other bones, as the ribs, fastened in the back-bone.

Q. VVhy hath a man, above all other creatures, a broad back which he can lie upon, which no beast can do?

A. Because a broad back doth answer a broad brest. If therefore a man should have a sharp back like unto beasts, that would be of an unseemly shape; and therefore it is requisite that he have a broad back.

Q. VVhy

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Q. *Why hath a man that lieth on his back, horrible visions?*

A. Because the passage or fine of the fantasie is open, which is in the fore-part of the brain, and so the fantasie is destroyed, and then those visions follow. Another reason is, because when a man lieth on his back, the humours are disturbed and moved upward, where the fantasie is, which is by that means disturbed.

Q. *Why is it naughty to lie on the back?*

A. Because, as the Physitians say, it disposeth a man to leprosie, madnesse, and to an *Incubus*: where you may note, that mania, or madnesse, is the hurt or disturbance of the fore-part of the brain, with a taking away or depravation of the imagination: but *Incubus*, that is, the night-mare, is a passage of the heart, when a man thinketh himself to be strangled in his sleep, and somewhat lie heavy upon his stomach, which he would put off.

Q. *Why hath the back-bone many joynts and knots, called Spondilia by the Physitians?*

A. For the moving of the back, and bowing of it, without which joynts that could not be done: and therefore they say amisse, which say that elephants have no such joynts; for without them they could not move.

Q. *Why do fish die presently when their back-bone is burst?*

A. Because in fish the back bone is in stead of the heart. Now the heart is the first thing that liveth, and the last thing that dieth, as it appeareth in the book *de longit. & brevit. vitæ*; and therefore when that bone is broken, fish can live no longer.

Of the Marrow.

Why doth a man die quickly after the marrow is hurt or perished?

A. Because the marrow proceedeth from the brain, which is a principal part of man, as it appeareth in two reasons. First, because the marrow is white like unto the brain. Then, because they have a small skin or rind, which that which is called *Nucha* hath not, which somewhat differeth from the marrow, because that *Nucha* hath two coverings like the brain, called *Pia mater* and *Dura mater*.

Of the Piles, or Flux of blood in the fundament.

Why have some men piles?

A. Because they are cold and melancholike, which melan-

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melancholy first passeth to the spleen, which is the proper seat of melancholy, and there cannot be retained through abundance of blood, and therefore from thence it is carried to the back-bone, where there are certain veins which have their end in the back, the which do receive the blood: and when those veins are very full of melancholy blood, then the ways and conduits of nature are opened, and that blood issueth out once a month, like a womans terms and flowers. And those men which have this course of blood, are kept from many infirmities, as the dropsie, plague, and such-like.

Q. Why are the Jews subject to this disease very much?

A. The Divines do say, because they cried at the death of Christ, *Let his blood fall upon us and our children.* And therefore it is said in the Psalm, *Percussit eos Deus in posteriora dorsi.* Another reason is, because the Jews do eat much flegmatick and cold meats, which do breed melancholy blood, which is purged by this flux of blood. Another reason is, because moving doth cause heat, and heat digestion, as *4 Meteor.* but the Jews do not move, nor labour, nor converse with men. Also they live in great fear, lest we should revenge the death of our Saviour, which doth also breed a coldnesse in them, which doth hinder digestion, which doth breed much melancholy blood in them, which is by this means purged.

Of the Heart.

WHY are the heart and lungs called lively parts of the body; in Latine, *Spiritualia membra*?

A. From this word *spiritus*, which signifieth breath, life, or soul; and because the vital spirits are ingendered in the heart. But that is no good answer; for so the liver & the brain might be so called, which is false, because the liver is a part which giveth nutriture, and the brain sense and life. And yet the consequence is clear, because the vital spirits are ingendred in the liver, and the sensible or animal spirits in the brain. And therefore the answer is, because that in the heart and in the lungs, breath and air is received, by which we live.

Q. Why are the lungs thin and spongie, light, and full of small holes?

A. Because the air might the better be received in them, for the cooling of the heart, and expelling superfluous humours, because

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because the lungs are the fan of the heart : and as a pair of bellows is puffed up by taking in the air , and shrinketh by blowing out the air ; so likewise the lights do draw the air when they cool the heart, and cast it out, lest through too much heat of the air drawn in, the heart should be suffocated.

Q. Why is the flesh of the lungs white ?

A. Because they be in continual motion.

Q. Why have those beasts onely lungs which have hearts ?

A. Because the lungs be no part for themselves, but for another, that is, for the heart ; and therefore it were superfluous for those beasts to have lungs, which have no heart: but nature never wanteth in things necessary, nor aboundeth in superfluities.

Q. Why do such creatures as have no lungs, want a bladder ?

A. Because such drink no water , to the end to make their meat to boil, or to help digestion, but only for the tempering of their meat, and therefore they want a bladder and urine ; as it appeareth in such birds as do not drink at all , as the Faulcon, and Sparrow-hawk.

Q. Why is the heart in the midst of the body ?

A. Because it should impart life unto all the parts of the body : and therefore it is compared to the sun, which is placed in the middle of the Planets, to pour light into them all. And therefore the Pythagoreans calling the heavens a great living creature, say, that the sun is the heart of it.

Q. Why onely in man is the heart placed on the left side ?

A. To the end that the heat of the heart should mitigate the coldnesse of the spleen ; for the spleen is the seat of melancholy, which is seated in the left side likewise.

Q. Why is the heart first ingendered ? For according to Aristotle, the heart doth first live, and last die ?

A. Because, as Aristotle saith, *de juven. & senect.* the heart is the beginning and original of life, and of all the parts of the body ; and without it no part can live. Note, according to the Philosopher, that of the seed retained in the matrix or womb, there is first ingendered a certain little small skin, which doth compass the seed, whereof first the heart is made of the purest blood ; then of a blood not so pure, the liver ; and of a thick and cold blood, the marrow and the brain.

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Q. Why are such beasts bold which have a little heart, as the lion?

A. Because that in a little heart the heat is well united and vehement, and the blood touching it, doth quickly heat it, and is speedily carried unto the other parts of the body, which giveth courage and boldnesse.

Q. Why are such beasts as have a great heart, fearful, as the hare?

A. Because the heat is dispersed in such a one, and is not able to heat the blood which cometh to it, and so fear is bred.

Q. Why is the heart continually moving?

A. According to *Aristotle*, *de motu cordis*, and *Galen*, because that in it there is bred a certain spirit, which is more subtil then the air; which, by reason of its great thinnesse and rarefaction, doth seek a larger space, filling the hollow room of the heart, whereof the dilating and opening of the heart doth follow. And because the heart is earthly, the thrusting and moving ceasing, his parts are at rest, and tend downward. And *Galen* giveth an experiment of an acorn, the which if it be put into the fire, the heat doth dissolve its humidity into smoke, which is thinner and greater then the humidity, and therefore doth occupie a greater place, and so cannot abide in the rind, but doth puff it up, and cause it to fall into the fire. The like is of the heart: and therefore note, that the heart of a living creature is triangular after a sort, and hath the least part toward the left side, and the greatest toward the right, and doth also open and shut in the least part, and by that means is in continual moving. The first moving is called of the Physicians *Diastole*, that is, the extending of the breast or heart. The second, *Systole*, that is, the shutting of the heart; and of these two movings, all the movings of the body do proceed, and the moving of the pulse which the Physicians do feel.

Q. Why are great beasts lean?

A. Because the natural heat proceeding from the heart, doth consume the watrish humidity which should be converted into fat. And for the most part, women are hotter then men, because they have much humidity in them, and have a moister heart then men.

Q. Why is the flesh of the heart so compact and thick together?

A. Because in a thick compacted substance, heat is strongly received and united, as it appeareth in other things. And be-
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cause the heart with its heat should moderate the coldnesse of the brain, it is made of that fat flesh, apt to keep a strong heat. :

Q. Why is the heart the hottest part of all living creatures ?

A. Because it is so compacted, it receiveth heat best, and because it should mitigate the coldnesse of the brain, as is said.

Q. Why is the heart the beginning of life ?

A. Because that in it the vital spirit is bred, which is the heat of life. And therefore according to the opinion of *August. de different. spirit. & anima*, the heart hath two bellies or receptacles, that is, the right and the left : the right hath more blood then spirit, the which spirit is ingendered to give life, and vivificate all the body.

Q. Why is the heart long, and of the figure of a pyramide, long and sharp ?

A. The round figure hath no angles, and therefore the heart is round, for fear lest any noisom and hurtful matter should be kept and retained in it. And also, as *Aristotle* affirmeth, because the round figure is the fittest for motion.

Q. Why is the blood principally in the heart, above all other parts ?

A. Because the blood is in the heart as in its proper place, or in its efficient place, which some do attribute to the liver. And thereupon the heart doth not receive blood of any other part, but other parts of it.

Q. Why do some creatures want a heart ?

A. Although they have no heart, yet they have somewhat that answereth to the heart, as it appeareth in fish and eels, which have the back-bone in stead of the heart.

Q. Why doth the heart beat and live in some creatures, when the head is off, as it appeareth in birds and hens ?

A. Because the vital spirits do remain longest in the heart, because the heart is that which is first alive, and last dead, as *Aristotle* doth say, and therefore the heart doth beat more then other parts.

Q. Why do all creatures which want a heart, or somewhat proportionable unto it, want blood also, as it doth appear in flies ?

A. The heart is the beginning of blood, and therefore the cause failing, the effect faileth.

Q. Why is the pulse of the heart more certainly judged in the right side then the left ?

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A. Because the heat of the heart is more lively there, then in the other side, and therefore it is better felt there then in the other side.

Q. Why doth the heat of the heart sometimes fail on a sudden, as in those who have the falling sicknesse?

A. This proceedeth, according to *Constant.* through the defect of the heart it self, and of certain small skins with which it is covered, the which being infected and corrupted, the heart faileth on a sudden: and sometimes it doth happen by reason of the parts next adjoyning. And therefore when any venomous humour doth go out of the mouth of the stomach, that doth hurt the heart, and the parts adjoyning, the which doth also cause this fainting. Note, according to *Aristotle*, that the disposition of the heart is known by the pulse of the heart, because a swift great beating pulse, doth give witness of the heat of the heart, and of a good complexion: a slowe and weak pulse doth betoken the coldnesse of the heart, and an evil complexion. And therefore a woman which is in health, hath a slower and weaker pulse then a man, as shall appear hereafter.

Of the Stomack.

Why is the stomach large and wide?

A. Because that in the stomach the meat is first concocted and digested, as it were in a pot, to the end that that which is pure, should be separated from that which is impure, as *Aristotle* saith; and therefore according to the quantity of the meat, the stomach is enlarged.

Q. Why is the stomach round?

A. Because that if it had angles and corners, as *Const.* saith, meat would remain in them, and breed evil humors, and a man should never want agues: the which humors neverthelesse are evacuated, lifted up and consumed, and are not hidden in any such corners, by reason of the roundnesse of the stomach.

Q. Why is the stomach full of sinews and feeling?

A. As *Aristotle* saith, because the sinews can be extended and enlarged, and so the stomach is when it is full: and when it is hungry, it is drawn together; and therefore nature doth provide those sinews.

Q. Why doth the stomach digest?

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A. Because of that heat which is in him, the which heat cometh from the parts adjoyning, that is, the liver and the heart. For we see in metals, that the heat of the fire doth take away the rust and drosse from the iron, and silver from tin, and gold from copper: and so by digestion, the pure is separated from the impure. And that digestion is of four sorts, according to the Physitians.

Q. Why is the stomach joyned to the liver?

A. Because, saith Constant. the liver is very hot, and with its heat, doth help digestion, and doth compasse the stomach.

Q. Why are we commonly colder after dinner then before?

A. Because that then the heat goeth to the stomach to further digestion; and so the outward parts be cold, being deprived of heat.

Q. Why is it hurtful to study presently after dinner?

A. Because that when the heat doth labour to help the imagination in study, then it ceaseth from digesting the meat, and so the meat remaineth raw. And therefore according to the Physitians, a man should walk somewhat after dinner.

Q. Why have women with childe an inordinate appetite of eating of coles, ashes, and such-like?

A. Because that such as are the humours in the stomach, such nutriment they desire: and because women with childe have corrupted humours, they desire such things, because like doth cover its like.

Q. Why doth the stomach slowly digest very fat meat?

A. Because such meats do swim in the stomach. Now the best digestion is in the bottom of the stomach, where fat meat cometh not. And therefore such as eat fat meat, are very sleepey after the eating of it, because their digestion is hindered.

Q. Why is all the body worse, when the stomach is ill at ease?

A. Because the stomach is knit with the brain, heart, and liver, which are the principal parts in man; and therefore when it is not well, the other are evilly disposed. Another answer is, that if the first digestion be hindered, the others are also hindered: for in the first digestion is the beginning of the infirmity that is in the stomach.

Q. Why are young men sooner an hungred then old men?

A. Young men do digest for three causes. First, for growing:

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ing: then for restoring of life ; and lastly, for conservation of their life, as *Hippocrates* and *Galen* do say. Else we answer, that young men are hotter then old men, because young men are hot and dry, and therefore the heat doth digest more ; and by consequence they desire more.

Q. Why do Physicians prescribe that a man should eat when he hath an appetite ?

A. Because much hunger and emptinesse will fill the stomack with naughty rotten humours, which he doth draw unto himself in stead of meat : which doth easily appear, because that if we fast over-night, we have an appetite to meat, but in the morning none. That is therefore a token that the stomack is filled with naughty humors, and especially its mouth, which is no true filling, but a decetiful. And therefore after we have eaten little, our stomack cometh to us again. And then the proverb is, One morsel draweth another : for the first morsel having made clean the mouth of the stomack, doth provoke appetite.

Q. Why do Physicians prescribe that we should not eat too much at a time, but by little and little ?

A. Because that when the stomack is full, the meat doth swim in it, which is a dangerous thing. Another reason is, that as very green wood doth put out the fire, so much meat choketh the natural heat, and put it out. And therefore the best Physick is to use temperance in eating and drinking.

Q. Why do we desire change of meats, according to the change of times ; as in winter Beef, Pork, Mutton : in summer light meats ; as Veal, Lamb ? &c.

A. Because the complexion of the body is altered and changed according to the time of the year. Another answer is, that this doth proceed from the quality of the season, because that the cold of the winter doth cause a better digestion, because the stomack and belly is hotter in winter, by reason of the compassing cold, as *Hippocrates* and *Aristotle* do teach.

Q. Why should not the meat we eat be too hot, as Pepper, and Ginger ?

A. Because that hot meat doth burn the blood, and disposeth to a leprosie. So contrariwise, meat too cold doth mortifie and congeal the blood. Also our meat should not be over-sharp,

sharp, because it procureth old age : and too much sauce doth burn the intrails, and procureth often drinking, as raw meat doth : and over-sweet meats do constipate and cling the veins together.

Q. Why is it a good custom to eat cheefe after dinner, and pears after all meat ?

A. Because cheefe, by reason of its earthlinesse and thicknesse, tendeth down toward the bottom of the stomach, and so putteth down the meat : and the like of pears. Note that new cheefe is better then old, and the old dry salt cheefe is very naught, and procureth the head-ake, and stopping of the liver ; and the older, the worser. Whereupon it is said, that cheefe is naught, and digesteth all things but it self.

Q. Why be nuts good after fish, as the verse is ?

After fish, nuts : after flesh, cheefe.

A. Because fish is of a hard digestion, and doth easily putrefie and corrupt ; and nuts do help digestion, because they are somewhat hot. Fish is poison at some times, and nuts are a remedy against poison. And note, the fish should be of a clear stony water, and not of a cold standing muddy water, and should be sod in wine with parsley, and so it hurteth least.

Q. Why is it unwholsom to stay long for one dish after another, and eat of divers kindes of meat ?

A. Because the first meat beginneth to digest, when the last is eaten, and so the digestion is not equally made, and therefore the meat digested beginneth to corrupt. But yet this rule is to be noted, touching the order of meats, that if there be any dishes whereof some are light in digestion, as chickens, kid, veal, soft eggs, and such-like, these meats should be first eaten : but the grosse meats, as venison, bacon, beef, roasted pork, hard eggs, and fried eggs, should be eaten last. And the reason is, because that if they should be first served and eaten, and were digested, they would hinder the digestion of the others : and the light meats, not digested, should be corrupted in the stomach, and be kept in the stomach violently ; whereof there should follow belching, loathing, head-ake, belly-ake, and great thirst. And by consequence it is very hurtful too at the same meal to eat milk, and drink wine, because they dispose a man to a leprosie.

Q. Which

Q. Which is better for the stomach, meat or drink?

A. Drink is sooner digested then meat, because meat is of greater substance, and more material then drink, and therefore meat is harder to digest.

Q. Why is it good to drink at dinner?

A. Because the drink should make the meat readier to digest. For if a pot be filled with fish or flesh without liquor, then both the pot and the meat is marred. And the stomach is like unto a pot which doth boil meat; and therefore Physicians do give counsel to drink at meals.

Q. Why is it good to forbear a late supper?

A. Because there is no moving or stirring after supper, and so the meat is not sent down to the bottom of the stomach, but remaineth undigested, and so breedeth hurt. And therefore a light and short supper is best, as the old verse doth shew.

Q. Why is it naught to drink wine fasting?

A. Because it doth greatly endanger the brain, and breedeth the falling sicknesse, and the apoplexie.

Q. Why is it hurtful to drink much cold water?

A. Because one contrary doth expel and hinder another: but the water is very cold, and therefore coming unto the stomach, doth hinder the digestion, and the heat which doth digest.

Q. Why is it unwholsome to drink new wine; and why doth it hurt the stomach very much?

A. Because it cannot be digested; and therefore it causeth the belly to swell, and so it doth in some sort cause a bloody flux: it doth also hinder the making of water. But to drink good wine, is wholsom.

Q. Why do the Physicians forbid us to labour presently after dinner?

A. For three causes. First, because moving doth hurt the vertue and power of digestion, and by that means the meat is expelled undigested. The second is, because stirring immediately after dinner, doth cause the parts of the body to draw the meat raw unto them, which doth breed sicknesse. The third, because moving doth cause the meat to descend before it be digested: but after supper it is good to stir and move, because we sleep not long after. And therefore we should walk a little, because

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because the meat may go to the bottom of the stomach:

Q. Why is it good to walk in the morning before dinner?

A. Because it maketh a man well disposed, and fortieth and strengthneth the natural heat, and causeth the superfluity of the stomach to descend. And therefore *Avicen* saith, that such as forgo this exercise, do fall into the inflammation of the heart.

Q. Why is it wholesome to vomit, as divers say?

A. Because it purgeth the stomach of all naughty humors; for it expelleth green and blue humors, which would breed agues, if they should remain in the stomach. And according to *Avicen*, a vomit purgeth the eyes, the head, and makes the brain clean.

Q. Why doth sleep greatly strengthen the stomach, and the digestive vertue?

A. Because in sleep the heat draweth inward, and helpeth the digestion: but when we awake, the heat remaineth about the senses, and is dispersed thorowout all the body.

Q. Why do some men, in some diseases, void their meat downward, in the same quantity and quality as they receive it into the stomach?

A. By reason of the weaknesse of the natural vertue, and expulsive; which disease is called *Lienteria*.

Of the Blood.

Why is it necessary that every living thing which hath blood, have also a liver?

A. According to *Aristotle*, because the blood is first made in the liver, because the liver is the seat of blood, according to other Physicians; and it is drawn from the stomach by certain principal veins, and so ingendered.

Q. Why is the blood red?

A. Because it is like to the place in which it was made, that is, unto the liver, which is of a red colour. And the blood is also sweet, because it is well digested and concocted: but if it have a little earthly matter mixed with it, it is a cause that it is somewhat salt, as it appeareth in *Aristot. lib. meteor.*

Q. Why have women thicker blood then men?

A. By reason of the cold which doth thicken, binde, and congeal and joyn together.

Q. Why doth the blood come to all the parts of the body from the liver, and by what means?

D

A. By

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A. By the means of the principal veins, as the veins of the head, of the liver, and such other, and to nourish all the body.

Of the Urine.

How doth the urine come into the bladder, seeing the bladder is shut?

A. Some say by sweating; and it seemeth to be true: but others say it cometh by a small skin which is in the bladder, which doth open, and let in the urine. *Theophrastus* saith, that the urine is a certain, and not a deceitful messenger of the health and infirmity of man. And *Hippocrates* saith, that men have white urine in the morning, and before dinner red, and after dinner pale, and likewise after supper: for there are divers colours of urine, whereof we will not speak at this present.

Q. Why doth the dropsie proceed from the liver?

A. Because that (saith *Const.*) the digestive power in the liver cannot convert the thick substance in the four humours, but it is converted onely into water, the which doth swell and puff up a man, and especially the belly.

Of the Gall.

Why have all living creatures a gall?

A. Because cholerick humours are received into it, the which through their sharpnesse do help the guts to expel superfluities: it doth also help the stomach in digesting.

Q. Why do the jaundies proceed from the gall?

A. Because the humour of the gall is bluish and yellow: and therefore when the pores of the gall are stopped, then that humour cannot go into the sack or bladder of the gall, but mingled with the blood, wandering thorowout all the body, and infecting the skin.

Q. Why hath not a horse, a mule, an asse, and a crow, a gall?

A. *Aristotle* saith, that although those beasts have no gall in one place, as in a purse or vessel, yet they have a gall dispersed by some small veins.

Of the Spleen.

Why is the spleen black?

A. Because it is caused of a terrestrial and earthly matter, that is, of a black substance, as *Aristotle* saith. Now the

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the effect is like unto the cause. Another answer is, according to the Physicians, because the spleen is the receptacle of melancholy, and melancholy of a black colour.

Q. Why is he a lean man which hath a great spleen?

A. Because the spleen doth draw much matter unto it self, which would go into fat. And therefore contrariwise, men which have but a small spleen, are fat.

Q. Why doth the spleen cause men to laugh, as Isidorus doth say? We laugh with the spleen, we be angry with the gall, we are wise with the heart, we love with the liver, we see with the brain, and speak with the lungs: that is, the cause of laughing, anger, love, wisdom, speech, and feeling, doth proceed from the spleen, the gall, the liver, the lungs, and the brain?

A. The reason is, because the spleen draweth much melancholy unto it, because it is its proper seat; the which melancholy is cause of sadness, and is there consumed, and so the cause failing, the effect faileth. And that melancholy is the cause of sadness, it appeareth in *Aristot. in Proœm. de anima*; and therefore that being consumed in the spleen, the contrary unto sadness followeth, that is, joy and gladness. And for the same cause the gall causeth anger: for cholerick men are angry, because they have much gall. For the better understanding of this, note that there are four humours in man; that is, blood, choler, flegme, and melancholy, whereof each hath a special receptacle, and place where it is received and kept. Of a dry and hot substance choler is ingendered, which goeth unto the gall, as to its seat and place. But of a cold and dry humour, melancholy is ingendered, which runneth to the spleen, as to its peculiar place and receptacle. But of a cold and moist humour, flegme is bred, which goeth to the lungs, as to its receptacle; or as the Physicians say, unto the spleen. But the blood, which is the most noble humour, is ingendered in the liver, and there its proper place seemeth to be.

Of carnal Copulation.

*W*hy do living creatures use carnal copulation?

A. Because it is the most natural work which is in living creatures, to beget the like unto themselves in kinde, to continue the kinde. For if carnal copulation were not, all kind

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of living creatures had long before this time perished.

Q. What is this carnal copulation ?

A. It is a mutual action of male and female, with instruments ordained and deputed for that act, to maintain the kind. And therefore Divines do say, that it is a sin to use that act for any end, but for begetting his like in kinde.

Q. Why is this action good in those to whom it is lawful, if it be moderately taken ?

A. Because, according to *Avicen* and *Const.* it doth ease and lighten the body, chear the minde, comfort the head and the sense, and take away many griefs, and melancholy, because it doth expel the fume of the seed from the brain, and it doth expel the matter of imposthume. And therefore sometimes through the intermitting of this act, the darknesse of the sight doth ensue, and giddinesse of the head. And therefore the seed of a man retained above a due time, is converted into some infectious humour.

Q. Why is immoderate carnal copulation hurtful ?

A. Because it doth destroy the sight, and dry the body : because, as *Aristotle* saith, *de gener. animal.* lechery and incontinency is the wasting of the pure humidity, and doth consume the brain: and it breedeth sharp fevers, as *Avicen* teacheth, and as experience doth shew. And it doth shorten the life of man, as *Aristotle* saith, *de longit. & brevit. vitæ.* And *Albertus* sheweth this in the sparrow, which, by reason of its often coupling, liveth but three years.

Q. Why doth carnal copulation very much hurt to melancholy men, and cholerick men, and generally to lean men ?

A. Because it doth dry the bones very much, which are dry of themselves. And contrariwise, it is good for the flegmatick and sanguine, as *Avicen* saith, because they abound with that substance which by nature is necessarily expelled. Although *Aristotle* affirmeth, that every fat creature hath but small store of seed, because the substance of it doth turn into fatnesse.

Q. Why do not the female of brute beasts covet carnal coupling after they be great with young ?

A. Because that then the womb or matrix is shut, and the flowers cease, and therefore the desire to the act doth cease.

Q. Why should not this act be used when the body is full ?

A. Be-

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A. Because it hindereth digestion, as *Aristotle* saith: likewise it is not good for a hungry belly, because it weakeneth him.

Q. *Why is it not good after a bath?*

A. Because then the pores are open, and the heat dispersed thorowout all the body, and therefore carnal copulation following a bath, doth cool the body very much.

Q. *Why is it not good after a vomit, or loosnesse in the belly?*

A. Because it is very perillous to purge twice in one day, as *Hippocrates* and *Galen* say: but so it is in this act of carnality, and loosnesse in the belly, because by this act the reins and kidneys are purged, and the guts by the vomit.

Q. *Why are wilde beasts furious when they couple, as it appeareth in harts, which bray; and asses, which are then almost mad, as Hippocrates saith?*

A. Because their blood is kindled with the desire of that carnal act; and nature also doth labour to expel superfluities in them, which in the sense do dispose unto anger and madnesse: and therefore the act done, they are tame and gentle.

Q. *Why is there such delight in the act of venery?*

A. Because this act is a base and contemptible thing in itself, naught and unclean, so far, that all creatures would naturally abhor it, if there were no pleasure in it; and so there should never be any carnal copulation, by reason of the uncleannesse of it. And therefore in this delight, nature doth willingly practise it, to the end that the kindes of living things should be maintained and kept.

Q. *Why do such as use it oft, take lesser delight in it then those that come to it seldom?*

A. For three causes. First, because the passage of the seed is over-large and wide, and therefore the seed maketh no stay there; by which stay, the delight is had. The second, because that through often going together, there is but little seed left, and therefore giveth no delight. Thirdly, because such, in stead of seed, cast out blood undigested and raw, or some other watry substance which is not hot, and therefore causeth no delight.

Q. *Whether can this carnal copulation be done by the mouth, so that beasts may conceive thereby; as some say of Pigeons, which they say by kissing do this act at the mouth, and conceive? and some say this is true in the wesel or ermyne.*

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A. According to *Aristotle*, that is untrue. For although Pigeons do play by the beak, yet they do not couple together this way, nor conceive: and because the Wessel doth bear his young ones from place to place in his mouth, they are of that opinion. And therefore *Aristotle* sheweth it thus: whatsoever goeth in at the mouth, it is consumed by digestion: but if the seed should go in at the mouth, then that should also be consumed by digestion. The major is plain, nor is no easie instance; and the conclusion doth hold in *Darii*.

Of the Seed of Man or Beast.

WHereof cometh the seed of men?

A. There are divers opinions of Philosophers and Physicians in this point. Some say that it is a superfluous humour of the fourth digestion. And some say that the seed is pure blood, flowing from the brain, concocted and made white in the stones. And some say it is the superfluity of the second or third digestion. But because sweat, urine, spittle, flegme, and choler, are the like, *Aristotle* saith that the seed is always the superfluity of the last nutriment, that is, of blood dispersed thorowout all the body: but yet principally it cometh from the principal parts, that is, from the heart, liver, and brain. An argument of this is, because those parts are greatly weakened in the casting out of the seed: and thereof it doth appear, that carnal copulation is not profitable nor good. But some think this to be true by over-vehement practise in this act: for otherwise moderately taken, it is good and wholsom, for the lightning and easing of the body, as is said before.

Q. Why is the seed of a man white, and the seed of a woman red?

A. It is white in man, by reason of his great heat, and because it is digested better, and made white in the stones, the flesh of which is white, as the flesh of the paps. But the seed of a woman is red, because it is the superfluity of the second digestion, which is done in the liver, which is red. Or else we may say, It is because the flowers corrupt undigested blood, and therefore it hath the colour of blood.

Q. Whether doth the seed of a man come from the parts of the body or from the humours?

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A. As some say, from the parts of the body : and that we prove, because we see that a lame man begetteth a lame childe, and a father which hath a scar, a childe which hath a scar, as *Aristotle* reporteth, *lib. de animal.* which could not be, if the seed did not fall from the parts of the body. But some say it cometh from the humors, because it is made of the last nutriment ; and the nutriment is no part , but an humour. But as for the limenesse or scar, that proceedeth from the imagination of the mother at the time of carnal copulation, as *Aristotle* saith, *2 de generat. animal.*

Q. Wherefore doth the imagination of the mother, which imagineth of an Ethiopian or Blackmore, cause the mother to bring forth a black childe, as *Albertus Magnus* reporteth of a Queen, who in the act of carnal copulation imagined of a Blackmore which was painted before her, and so brought forth a Blackmore ?

A. *Avicen* saith that an imagination of a fall, maketh a man fall ; and the imagination of a leprosie, maketh a man a leper. And so in this purpose the imagination is above the forming power , and therefore the childe born followeth the imagination, and not the power of forming and shaping, because it is weaker then the other.

Q. Whether doth the seed of the man enter into the substance and matter of the childe ?

A. The seed of the father and the mother do go into the substance of the childe in the womb, because that as cream goeth into the substance of cheese , so the seed of man into the fruit of the womb like unto the cream, and the flowers of the woman do enter in like unto the milk. But this opinion doth not seem to be of force ; and therefore , according to *Aristotle* and other Philosophers, we say that the seed doth not go into the substance of the childe : and it is proved thus ; because that so the matter and the efficient cause should be all one, which is against the Philosopher. The consequence is good, because the seed is the efficient beginning of the childe, as the builder is the efficient cause of the house, and therefore is not the material cause of the childe. It is proved another way , because there is the self-same material cause of nourishment and generation, *2 de anima*, because we have our being and our nourishment of the same matter: but the seed cannot

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not be the material cause of nourishment, according to *Averrois*, and therefore not of being. But in truth this it is, both the seeds are shut and kept in the womb : but the seed of the man doth dispose and prepare the seed of the woman to receive the form, perfection or soul; the which being done, it is converted into humidity, and is fumed and breathed out by the pores of the matrix ; which is manifest, because onely the flowers of the woman are the material cause of the young one.

Q. Why doth the matrix or womb of a woman draw greedily the seed of a man ? For as Averrois saith, there was a maid in a bath where some seed had been cast, the which the maid drawing, did conceive with childe, and was delivered.

A. Averrois doth say, that the womb and nature doth draw the seed, as the loadstone doth iron, and the agathe steel : but she doth draw it for the perfection of her self.

Of womens Monthly terms.

Why have women monthly terms or flowers ?

A. Because they are cold in respect of men : and because all their nourishment cannot be converted unto blood, a great part of it is turned into their flowers, the which in every woman in every month are expelled : I say, of every woman which is in health, and of a certain age ; that is, after thirteen years : for before they run not, though she be in health ; and some diseased women have them not.

Q. Why do they run from women ?

A. Because it is an infectious matter : for as Aristotle saith, If that substance, being young and flowing, do touch a tree or green bough of a tree, the tree doth die, and not prosper : yea, Aristotle doth say, that if dog should taste of it, he would run mad three days. And therefore nature would expel it every month, as being an enemy to life. And if women do retain it above their due time, according to Aristotle, it doth breed great infirmities and diseases, as swooning.

Q. Why do they not run before they be thirteen years of age ?

A. Because young women be hot, and so digest all their nourishment ; and therefore they are not bred in them before that age, nor expelled, unlesse the goodnesse or naughtinesse of their complexion do hinder it.

Q. Why

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Q. Why have not women them after fifty yeers of age?

A. Some answer, that old women be barren, and therefore they cease. But a better answer is, that then nature is weak in them, and therefore they cannot expel them by reason of overmuch weaknesse. And therefore there is great store of immundities bred in them in one whole lump, and they are by that means so infectious, that they infect men with their breath, and then the cough and other infirmities come upon them. And therefore according to the counsel of the Physicians, then men should abstain from them.

Q. Why do not such women corrupt and infect themselves?

A. Because poison doth not work upon it self, but upon some other object: or else it doth not hurt themselves, because it is their nature. *Alberius* reporteth of a certain maid that was brought to him in *Colen*, which did eat spiders, which did her no hurt at all, but were good meat unto her. And *Aristotle* in his book of the government of Princes, to *Alexander*, reporteth of a maid which in her youth was nourished with poison. And some have done the like.

Q. Why have not women with childe their flowers?

A. Because that then the flowers turn into milk, and into the nourishment of the childe: for if a woman with childe have them, it is a signe of miscarrying with her childe.

Q. Why do they run the first three months in women with childe?

A. By reason of the smalnesse of the childe, which cannot take all that matter and substance.

Q. Why have not the females of brute beasts, as of fish and flesh, their flowers?

A. Because, as *Aristotle* and *Alberius* say, in beasts that go with feet, the flowers turn into hair; in fish, into scales; in birds, into feathers. And therefore in beasts you may note, that the female is more hairy then the male, and the female of fishes fuller of scales, and the female of birds fuller of feathers.

Q. Why do the flowers receive their name Menstrua, of this word Mensis a month?

A. Because it is a space of time which doth measure the moon; for the moon doth end her course in nine and twenty days and fourteen hours. Now the moon hath dominion over moist things; and because the flowers are in humidity, they

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take the denomination of the month, and are called monthly terms: for moist things increase as the moon increaseth, and decrease as she decreaseth.

Q. Why do they run longer time in some then in others, as in some six or seven days, and ordinarily in all three days?

A. The first are colder, and therefore they increase the more in them, and by consequent they are the longer in expelling: and other women are more hot, and therefore they have the fewer, and a shorter time in expelling them.

Q. Where are the flowers kept before they run?

A. Some say, in the matrix or womb. But *Auerrois* misliketh this, and saith that the matrix is the place of generation, and that those flowers further generation nothing at all. And therefore he saith that there are certain veins about the back-bone which do keep them. And a signe of this is, because those women at that time have great pain in the back by reason of expelling their flowers.

Q. Whether are the flowers which are expelled, and the flowers that the childe is ingendered of, all one?

A. No: because the one are unclean, and unfit for that purpose; but the other very pure and clean, and therefore that blood is fit for generation.

Q. Why do women which are gotten with childe when they have their flowers, bring forth weak children, and Leprous?

A. Because those flowers are venomous; yea, a woman in her flowers is most infectious. And so the cause doth shine in the effect, as the Philosopher saith, the effect carrieth a likenesse of the cause, and therefore such a childe is evilly disposed of body.

Q. Why have not women their flowers all at one time of the month, but some in the new moon, some in the full, and some in the wane?

A. By reason of their divers complexions. And though all women in respect of men be flegmatick, yet of women among themselves, some are more sanguine then others, some more cholerick. And as months have their quarters, so have they their complexions; the first sanguine, the second cholerick. A woman of a sanguine complexion, hath her flowers in the first quarter, a cholerick in the second, a melancholy in the third, and so in the rest.

Q. Why have such women as are of a sanguine complexion, their flowers in the first quarter?

A. Be-

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A. Because, as *Galen* saith, every such thing added to such a thing, doth make it more such; and therefore the first quarter of the moon increasing blood in a sanguine complexion, she doth then expel it.

Q. Why have women their flowers so oft in the end of the month?

A. Because generally all women be flegmatick, and the last quarter is flegme. Or else this doth proceed of a defect, and therefore cold doth work then to multiply that matter, and the matter multiplied is then expelled.

Q. Why have women pain and grief in the running of their flowers?

A. Because it is like the pain of the strangury, that is, making water drop by drop: for as the strangury, by reason the drink is undigested, offendeth the subtil passage of the urine, as it happeneth after a bath; so the flowers which are undigested, and of an earthly substance, do hurt the passage by which they go.

Q. Why doth a woman easily conceive after her flowers are run from her?

A. Because she is the better prepared unto conception, as being made clean from her flowers.

Q. Why do women look pale when they purge their flowers?

A. Because then the heat goeth from all the outward parts of the body to the inward, to help nature, and to expel the flowers; the which deprivation of heat doth cause a palenesse in the face. Or else it is because that flux is caused of raw humours, which when they run, do make the face colourlesse, and so by consequence cause a palenesse.

Q. Why doth a woman which hath her flowers, detest her meat?

A. Because nature doth labour more to expel the flowers, then to digest; and therefore if she should eat meat, that meat should remain raw, which careful nature doth not admit.

Of Barrenesse.

Why are some women barren, and cannot conceive?

A. According to the Physicians, for divers reasons. The first is, because it proceedeth sometime of the man, that is, when he is of a cold nature, because then his seed is unfit for generation. The second, because his seed is somewhat waterish, and therefore doth not stay in the womb. The third, because the seed of the man and the woman have not the same proportion

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tion: as if the man be melancholy, and the woman sanguine; or if the man be choleric, and the woman very flegmatick: because, as it is evident in Philosophy, the agent and the patient ought to have the same proportion: otherwise the action is hindered.

Q. Why do fat women seldom conceive with childe?

A. Because they have a slippery womb, out of which the seed slippereth, and is not holden in. Or else because the mouth of the matrix is very strait, that the seed cannot enter in; or if it do, it goeth in very slowly, so that the seed doth wax cold in the mean time, and so is unfit for generation, and is resolved into a fleshy substance.

Q. Why do women of very hot complexions seldom conceive with childe?

A. Because the seed conceived in them is extinguished and put out, as a little water cast into the fire. And therefore we see that women which do vehemently desire the flesh, seldom conceive with childe.

Q. Why are common women and whores never with childe?

A. By reason of divers seeds, which do corrupt and spill their instruments of conception; for it maketh them so slippery, that nature cannot retain the seed. Or else it is, because one seed destroyeth another, and so neither is good for generation. And note out of *Albertus*, that the best remedy to help conception, is to take the matrix of a hare beaten to powder, and put into drink, which worketh much to conception.

Of Conception.

VV*hy do some women conceive a male-childe?*

A. If the seed fall on the right side of the matrix or womb, a male-childe is begotten, because that side is hotter then the other, and heat principally worketh to the begetting of a male-childe. And therefore, as *Albertus* saith, if the right side of a woman doth swell, it is a signe that she goeth with a male-childe. But some give another reason, that is, when the seed of the father hath dominion over the seed of the woman, then a male-childe is begotten: if the womans prevail, then it is a female.

Q. Why do some women conceive a female-childe?

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A. Because the seed is fallen into the left side of the matrix, which is colder then the right, by reason of the spleen joyning to it, which helpeth cold, as *Alberius* saith. When the woman after the act of carnal copulation doth lie on the right side, it is a boy; when on the left, it is a wench: for the seed doth run to that side on which the woman lieth, and then such a childe is formed.

Q. Why hath a woman a womb?

A. Because it is the proper place of generation, and placed in the midst of the woman. For as all the immundities of a city do run into the sink; so all their monthly terms do run to the womb or matrix.

Q. Why have some women long and slender children, and some short and thick?

A. Because, as *Galen* and *Averrois* say, the childe is formed according to the quantity of the womb: and therefore because some women have a long and narrow womb, their children be long and slender; and some contrariwise short and large, therefore their children be short and thick.

Q. Why doth a woman sometime conceive twins?

A. According to *Galen*, because there are seven cels or receptacles of seed in the womb, and therefore a woman may naturally have so many children at once, as there falleth seed into those cels: for there are three in the right side, and three in the left: in the right side boys are ingendred, and in the left wenches. And in the midst of those cels or chambers, there is another, where old writers say an Hermaphrodite is ingendered, that is, one who hath the secret parts of both sexes. And therefore if a woman should have more then seven children at once, it should be rather miraculously then naturally.

Q. Why are twins but half men, and not so strong as other men?

A. Because the seed and substance which should have been for one man, is divided into two, and therefore they be weak: and in truth, they do not oft live long.

Of Hermaphrodites.

How are Hermaphrodites begotten?

A. Because there are three principal cells in the womb, one in the right side, another in the left, and the third in the mid-

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middle; into which when the seed doth fall, an Hermaphrodite is said to be begotten in this manner: because nature doth always tend unto that which is best, therefore she doth always intend to beget the male, and not the female, because the female is only for the males sake, & a monster in nature. Therefore the male is sometime begotten in all principal parts; and yet through the evil disposition of the womb and object, and inequality of the seed, when nature cannot perfect and end the male, she bringeth forth the female or Hermaphrodite. And therefore the natural Philosophers say, that an Hermaphrodite is impotent in the privy part of man, as appears by experience.

Q. Why doth not nature dispose in him two secret parts of a man, or two of a woman; but one of a man, and one of a woman?

A. Because then nature should make one of them in vain: but that is against the Philosophers, when they say that God and nature do make nothing in vain.

Q. Whether is an Hermaphrodite to be reckoned for a man, or for a woman?

A. It is to be considered in which member he is fittest for the act of carnal copulation: if he be fittest in the womans act, then it is a woman; if in the mans, he is a man.

Q. Whether should he be baptized in the name of a man, or of a woman?

A. In the name of a man, because names are given *ad placitum*, and therefore he should be baptized according to the worthiest name, because every man is worthier then a woman, because every agent is worthier then its patient, as *Aristotle* saith, *lib. 3. de anima.*

Q. Whether shall he stand in judgement in the name of a man or of a woman?

A. According to the Law, he should first swear, before he be admitted into judgement, which secret part he can use, and so is to be admitted according to the use and power of that part.

Of Monsters.

Doeth nature make any Monsters?

A. She doth, 2 *Phys.* for if she did not, she would then be deprived of her end. For of things possible, she doth always purpose to bring forth that which is most perfect and best:

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best : but in the end, through the evil disposition of the matter, and influence of some special constellation, not being able to bring forth that which she intended, she bringeth forth that which she can. As it happened in *Albertus* his time, when in a certain village a cow brought forth a calf half a man : then the country-men suspecting a shepherd, would have burned him with the cow : but *Albertus* being skilful in Astronomy, said, that this did proceed from some special constellation, and so delivered the shepherd from their hands.

These are Albertus his words :

We saw that their two bodies were joyned in nothing but in the back : they had two heads, four feet, four hands, and did go which way they lusted. And he saith, They reported unto us, that there were two men joyned in the back, and were of a contrary complexion, the one furious, and the other meek : they lived two years, and the one died, and the other lived long after, until the stink of the other did kill him. I ask, How can this be ? It is answered thus ; Because the seed is cast into the cells or receptacles of the womb, which seed was enough for two children ; and then by chance it doth sometimes happen, that the skin or distance betwixt the two cells or receptacles is broken, and they knit and joyn in the back, and have two heads.

Q. Whether be they one or two ?

A. Aristotle saith, You must look unto the heart ; and if there be two hearts, there be two men.

Q. Why is a man born sometimes with a great head, and six fingers on one hand, or with four ?

A. Aristotle saith, It proceedeth of superfluity and abundance of matter : when there is too much matter, then he is born with a great head, or six fingers : but if there be want of matter, then there is some part too little, or lesse then it ought to be.

Of Infants.

VV*hy are some children altogether like the father, some like the mother, some to both, and some to neither ?*

A. If the seed of the father do fully overcome the seed of the mother, the childe doth wholly resemble the father : but if the mothers seed predominate, then he is like unto the mother :
but

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but if he be like neither, that doth happen for many causes: sometimes through the four qualities, sometimes through the influence of some heavenly constellation. *Alberus* giveth an example, and saith, That there was on a time a good constellation for begetting of hogs, and a childe was then begotten and brought forth which had a face like a hog: and according to this, divers sorts of monsters are brought forth.

Q. Why are children oftener like the father then the mother?

A. That proceedeth of the imagination of the mother, which thinketh of the disposition of the father in the act of carnal copulation: and therefore by reason of the strong imagination in the time of conception, the children get the disposition of the father: as it appeareth before of the Queen which had her imagination on a Blackmore; and of an Ethiopian Queen which brought forth a white childe, because her imagination was upon a white colour. And this is seen in *Jacob's* skill in casting rods of divers colours into the water when his sheep went to ram.

Q. Why do children sometime resemble more their grandfathers and great grandfathers, then their parents?

A. Because the vertue and force of the grandfather is grafted into the hearts of the begetters: and it may be said, that sometime it doth proceed of the similitude of the nutriture, & then the childe is formed by the similitude of the grandfathers.

Q. Why are the parts of the chilles body of divers qualities, and some soft?

A. This proceedeth of the predomination of divers elements, because the bones are made of a terrestrial matter, and therefore are hard: but the brain and the marrow are made of a more watry matter, and therefore are more soft: but the vital spirits and animal spirits are ingendered of a more aeriuous substance, and those vital spirits are principally in the liver and in the heart.

Q. Why do children, according to the common course and use of nature, come out of the mothers womb in the ninth month?

A. Because the childe is then fully perfect; or else because some benigne Planet doth reign, as *Jupiter*, who is a friend to nature: for according to the Astronomers, he is hot and moist, and therefore doth temper the malice and naughtinesse of *Sa-*

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turn, which is cold and dry ; and therefore for the most part children born in the ninth month are healthful.

Q. Why do children born in the eighth months end, for the most part die quickly ? And why are they called the children of the Moon ?

A. Because the Moon is a cold Planet, which hath dominion over the childe, and therefore doth binde the childe with its coldnesse, which is the cause of its death.

Q. Why doth a childe cry assoon as he is born ?

A. Because of the sudden change from heat to cold, which cold doth hurt its tendernesse. Another reason is, because the childes soft and tender body is wringed and put together, coming out of the narrow and strait passage of the matrix ; and especially the brain being moist, and the head prest and wringed together, is cause that some humours do distil by the eyes, which are the cause of tears and weeping. The Divines say, It is for the transgression of our first fathers, and original sin.

Q. Why doth a childe put his finger into his mouth when he cometh first into the world ?

A. Because that coming out of the womb, he cometh out of a hot bath ; and therefore entering into the cold, putteth his finger to his mouth for want of heat.

Q. How doth a childe come into the world out of the womb ?

A. He cometh forth with the head forward: for if he should come with the thighs or arms forward, he should kill himself and the mother.

Of the young one in the womb.

How is the young one successively ingendered in the womb ?

A. The first six days, the foetus hath the colour of milk ; but in the six days following, a red colour, which is neer unto the disposition of flesh; and then it is changed into a thick substance of blood, curded and consistent, not running, like unto a masse of flesh : but in the twelve days following them, this substance is made so thick and sould, that it is able to receive shape and form ; because a fluid or running substance keepeth no impression, and so every day receiveth some other disposition until his birth. And how he is governed every month by the Planets, Boerhaave doth teach elsewhere.

Q. Whether doth the childe in the womb void excrements, or make water ?

E

A. No.

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A. No ; and the reason is , because he hath not the first digestion, which is in the stomach, because he receiveth no meat by the mouth, but it cometh to him at the navel : and therefore he maketh no water, but doth sweat ; which urine is but little in quantity, and is reserved in a small skin in the matrix, and at his birth is cast out in abundance.

Q. Why doth the childe come out of the womb easily after seven, eight, or nine months ?

A. Because, saith *Galen*, when the fruit is ripe, then the ligaments are easily broken, and so it falleth easily.

Of Abortment, or Untimely birth.

VV*Hy do women which eat unwholesom meats , as rammish putrified meats, easily miscarry ?*

A. Because it breeds putrified seed in them; which the mind abhorring, doth cast out of the field of nature, that is, out of the womb, because it is unfit for the most noble shape, that is, for mans form and shape, which is apt to receive the soul.

Q. Why doth wrestling or leaping cause the casting of the childe, as some crafty women do of purpose ?

A. Because that by such leaping the ligaments of the childe are loosed, and by consequence there followeth abortment, because it can be no longer kept in the womb.

Q. Why doth the striking of thunder or lightning cause a woman to miscarry ?

A. Because that the vapour is burning, and doth easily hurt the tender substance of the child, entering in at the pores of the matrix or womb. Yea, *Albertus* doth say, that if the childe were alive, lightning and thunder would kill him.

Q. Why doth thunder and lightning rather cause young women to miscarry then old ?

A. Because the bodies of young women are fuller of pores, and more slender, and therefore the vapour of lightning doth sooner enter into their body; but old women have a thick skin, and well compacted, and therefore the vapour cannot enter in, and cause this abortment.

Q. Why doth much joy cause a woman to miscarry with her burden ?

A. Because that in the time of joy, the woman is destitute of heat, and by consequence, miscarrying doth follow. The same reason

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reason doth cause fear to breed it, because then the hear runneth to the heart, to help it, and forsaketh the matrix.

Q. Why do women easily miscarry when they are newly with childe, that is, the first, second, and third month?

A. Galen saith, that as apples and pears do easily fall in the beginning, because the knots and ligaments are soft and weak; so it is of a childe in the womb.

Q. Wherefore is it hard to miscarry when they are come to the middle of their time, that is, three, four, five, six months?

A. Because that then the ligaments are stronger, and fortified, and therefore are not easily broken.

Of divers matters.

W*hy have some women greater grief then othersome in child-birth?*

A. For three causes. Sometimes for the greatnesse of the childe, or because the Midwife is unskilful. Sometimes because the childe is dead, and boweth not, nor can be bowed in going forth. And for the contrary causes some have lesse pain.

Q. Why hath not a man a tail like unto beasts?

A. Because a man is a living creature whose property is to sit: but this is proper to no beast which hath a tail.

Q. Why do such as keep baths, or hot houses; expel the heat out of the furnace better with cold water then with hot?

A. Because they are contrary qualities, which work strongly the one against the other, and therefore the heat is better expelled from the stones.

Q. Why doth hot water sooner freeze then cold?

A. Because hot water is thinner, and by consequence, giveth better entrance to the cold.

Q. Why are men faster about the belly then in other places?

A. Because the greatest digestion is in the stomach, and therefore those parts which are neereest unto the stomach, are greatest and fastest.

Q. Why is every living creature sad after carnal copulation?

A. Because this act is filthy and unclean, and so every living creature doth abhor it; and when men do think upon it, they are ashamed and sad.

Q. Why cannot drunken men judge of tastes as well as sober men?

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A. Because the flesh of the tongue is full of pores, and spongy, and receiveth great moisture in it, and more in drunken men then in sober; and therefore their tongue through often drinking, is full of naughty humours, and by reason that it is so full, the instrument of taste is made thick and grosse, because that taste is a vein of the tongue, a subtil thin flesh being taken away. And therefore through the thickning of the mean, that is, of taste it self, drink taken of drunkards is not presently felt, because that unto due feeling there is requisite to have a due proportion of the mean. And of this also it is understood why drunkards have not a perfect kinde of speech.

Q. *Why have melancholy beasts long ears; and why are not men wise for the most part which have long ears, but such as have short, as Aristotle saith in his book de animal.?*

A. The ears do proceed of a cold and dry substance, which is called a gristle, which is apt to become a bone. And because melancholy beasts do abound in this kinde of substance, therefore they have such long ears.

Q. *But why are the others half fools?*

A. Because the mindes and souls do follow the bodies: for if the senses of the body be subtil, then the soul exerciseth subtil operations, as well active as speculative; and the contrary is in a grosse body.

Q. *How is the intellectual soul joyned to the childe in the womb of the mother? whether doth the father which begetteth him make the matter apt and fit to receive the soul?*

A. The answer is, as the Divines do say, That into a matter of substance sufficiently disposed and made fit, God doth infuse the intellectual soul: and *S. Augustine* saith the like, The soul in creating is infused, in infusing created.

Q. *Why do hares sleep with their eyes open?*

A. Because they have their eyes standing out, and their eyelids short, and therefore they are hardly shut. Another reason is, because they are very fearful beasts, and therefore for the safeguard of themselves they sleep with their eyes open.

Q. *Why do not crows give their young ones meat till they be nine days old?*

A. Because seeing them of another colour, they think they are of another kinde: in the mean space Almighty God doth feed them

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them with the dew of heaven, as the Psalmist saith, *He who doth give beasts their food, and young crews which call upon him.*

Q. VVhy are sheep and pigeons very milde beasts?

A. Because they want gall; and it is the gall which stirreth unto anger.

Q. VVhy have birds their stones inward?

A. If they had them outward, they would hinder their flying and lightnesse.

Q. VVhy do not birds pisse?

A. Because that superfluity which should be converted into urine, is turned into feathers; as it appeareth, because there is much moistnesse in the feathers. Another reason is, because they are in continual moving, and therefore much moisture in them is dried up by the air and winde.

Q. VVhy are long eggs a signe and cause of the male, and flat short eggs of the female?

A. Because (as it pleaseth Hippocrates) it is the condition and property of heat to send from the centre, to the circumference of cold. And therefore if there be any long eggs, it is a signe they have a great heat, and therefore passe into the substance of the male, because in every kinde of thing the male is hotter then the female, as the Philosopher saith. If the eggs be short and flat, it is a signe the heat is small and undispersed, and therefore goeth into the substance of the female.

Q. VVhy do we hear better in the night then in the day?

A. Because (as Aristotle saith) there is greater quietnesse in the night then in the day, because the sun doth not so well draw up vapours in the night as in the day, and therefore the mean is more fit and ready; and the mean being fit, the motion is better done by it: the which is said to be done with a sound. Another reason is, because there are more motions of the air and sounds in the day then the night, which do hinder one another. Also in the night there is greater silence, which is opposite unto sound; and things opposite put one against the other, shew the better.

Q. VVhy doth a man laugh sooner if he be touched under the armpits, then in any other part of the body?

A. Because there is in that place a meeting of many sinews, and because the mean we touch by (which is the flesh) is more

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subtil there then in other parts, and therefore a better feeling. And this is true, if that place be not touched too hardly; for if you do so, then there is not that delight: and when a man is moderately and softly touched there, the spirits which are there are dispersed, and run into the face, and then from thence is cause of laughter.

Q. Why is wood burned converted into a black cole, and a bone burned into a white substance?

A. Because the wood, before it was burned, was reasonable moist, and so after burning getteth heat accidentally, and that heat is not able to consume all the moisture of the wood, and therefore there remaineth some after the burning, and is converted into a black substance, because the humidity of the wood was slimy, and could not be altogether consumed by the fire. But a bone of its own nature is cold and dry, having but small moisture in it, which the burning doth wholly consume, and so accidentally the moisture being consumed, the bone waxeth white.

Q. Why do some women love white men, and some black?

A. There are two answers. Some women have a weak sight, and such delight in black, because the white doth hurt the sight more then black. The second reason is, because like doth delight in the like: but because some women are of a hot nature, such are delighted with black, because blacknesse doth follow heat. And others are of a cold nature, and these are delighted with white, because cold is the mother of whitenesse.

Q. Why do living creatures sleep?

A. For necessity, because the instruments of divers actions are wearied, he being long awake, and by rest which is in sleep, they are comforted, as Aristotle saith.

Q. Why are Students ready to sleep after dinner, if they go about to study, and not if they solace themselves?

A. Because when a man doth apply his minde to study, the natural heat goeth from the outward parts of the body to the inward, and there is strengthened, because there cometh much of it together, and causeth a fume to ascend from the meat to the head, which is the cause of sleep. Or else we may answer, that when the power of vertue with which we live, is strongest, the natural power is weakned: but when a man doth solace

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himself by his pleasure, the natural heat is spread abroad, and suffereth no vapour to ascend unto the brain, and so sleepeth not, but is kept from sleep by reason that the heat is dispersed.

Q. Why do men willingly sleep after labour?

A. Because that through continual moving, the heat is dispersed to the external parts of the body; the which, after the labour is past, gathereth together to the internal parts of digestion, there to digest; and from digestion, vapours do rise from the heart to the brain, the which do stop the passages by which the natural heat should be dispersed to the external parts: and then the external parts being cold and thick by reason of the coldness of the brain, sleep is procured. And by this it appeareth, that such as eat much and drink much, do sleep much and long, because great store of humours and vapours are bred in such, which cannot be digested and consumed of the natural heat.

Q. Why are such as sleep much, evil disposed and ill coloured?

A. Because that in sleep much moisture is gathered together, which cannot be consumed, which is expelled in waking, and so it doth cover to go out thorow the superficial parts of the body, and especially it covereth to the face, and so is cause of a bad colour, as it appeareth in such as be flegmatick, who desire more sleep then others.

Q. Why doth it appear unto some in their sleep, that they eat and drink sweet things?

A. Because the flegme drawn up by the jaws, doth distil and drop to the throat, and this flegm is after a sort sweet, and therefore that seemeth so unto them.

Q. Why do some dream in their sleep that they be in the water and drowned; and some that they be in the water and not drowned: and this doth happen especially in such as are flegmatick?

A. The reason is (as Aristotle saith) because the flegmatick substance doth run to the high parts of the body, and then they think they are in the water and drowned: and when that substance draweth unto the internal parts, then they think they escape. Another reason may be overmuch repletion and drunkenness: and therefore when a man is overmuch filled with meat, the fumes and vapours ascend and gather together, and therefore they think that they are drowned and strangled: but

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if they cannot ascend so high, then they seem to escape.

Q. May a man procure a dream by an external cause?

A. Aristotle holdeth that it may be done. If a man do speak softly at a mans ears, and awake him, then of this stirring of the spirits, there are thunderings and buzzings in the head, and so a dream of that. And so some men have dreams by divine revelations, when it pleaseth God to send any.

Q. How many humours be there in mans body?

A. Four, whereof every one hath its proper place in mans body. The first is Choler, which Physicians call *flava bilis*, and is placed in the liver. The second is Melancholy, called *atra bilis*, whose seat is in the spleen. The third is Flegm, whose place is in the head. The fourth is Blood, whose place is in the heart.

Q. What conditions and qualities hath a man of a sanguine complexion?

A. He is fair and beautiful; he hath his hair for the most part smoothe; he is bold; he retaineth that which he hath conceived; he is shamefac'd; given to musick, a lover of sciences, liberal, courteous, and desireth not revenge.

Q. What properties do follow a flegmatick complexion?

A. They are of a dull wit, their hair never curls, they are seldom very thirsty, they are much given to sleep, they dream of things belonging to water, they are fearful, covetous, and given to heap up riches, and are weak in the act of venery.

Q. What properties do follow the cholerick man?

A. He is furious and angry, quarrellsome, given to war, pale-coloured; he is unquiet, drinketh much, sleepeth little, and desireth much the company of women.

Q. What properties do follow the melancholy man?

A. He is swarty, brown of complexion, his veins hidden, he eateth little, and digesteth lesse: when he dreameth, it is of dark confused things: he is sad, fearful, exceeding covetous, and incontinent, unlesse he bridle his affection.

Q. What dreams do follow these complexions?

A. Pleasant merry dreams do follow the sanguine complexion; fearful dreams the melancholy; the cholerick dream of chiding, fighting, and fire; and the flegmatick of water. And this is the reason why a mans complexion is said to be known by his dreams?

Q. What

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Q. What is the reason that if you cover an egge over with salt, and let it lie in it a few days, all the meat within it is consumed?

A. The great drinesse of the salt doth consume the substance of the egge: but in sand, some say they may be kept long, as the Mariners do practise.

Q. Why is the melancholy complexion the worst of all?

A. Because it is the dregs of the blood, which is an enemy to mirth, and farthest from the beginning of mans life, and bringeth old age and death, because it is dry and cold.

Q. Why are the flegmatick for the most part dull of wit?

A. Because that as the vivacity of wit proceedeth of heat, so of cold the contrary, which they are subject unto.

Q. Whereof doth it proceed, that some men die with extreme joy, and some with extreme grief?

A. Over-great joy doth over much cool the internal parts of the body; and over-much grief doth drown and suffocate the heat, the which failing, a man dieth.

Q. Why hath a man so much hair on his head?

A. The hair of the head doth proceed of the vapors which rise from the stomack, and ascend to the head, and also of the superfluities which are in the brain: and these two passing thorow the pores of the head, are converted into hair, by reason of that heat and drinesse of the head. And because mans body is full of humours, and he hath more brain then other creatures, and also more superfluity in the brain, which the brain expelleth, it followeth that he hath more hair then other living creatures.

Q. How many ways is the brain purged, and other hidden parts in the head?

A. The watry and grosse humours are purged by the eyes, melancholy by the ears, choler by the nose, and flegme by the hair.

Q. What is the reason that some blush and change colour, when they have that which they would not?

A. Shamefacednesse is a kinde of anger and displeasure and fear joyned together, as when a man is offended against himself, or against another: and therefore when they see or hear something to be discovered which our selves have done naughtily, or would not have known, the anger which we conceive is

greater

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greater then the fear, and therefore the blood runneth to and fro, and in the end remaineth in the highest parts of the body, until the spirits be quiet and pacified, and the passion gone.

Q. VVhat is the reason that such as are very fat in their youth, are in danger to die on the sudden?

A. Such have very small and close veins by reason of their fatnesse, so that the air and breath can hardly have free course in them; and thereupon, the natural heat, wanting some refreshment of the air, is put out, and as it were quenched.

Q. VVhy do garlick and onions grow after they are gathered?

A. It proceedeth of the great humidity which is in them.

Q. VVhy do men feel cold sooner then women?

A. Because men, being more hot then women, have their pores more open, and therefore the cold doth sooner enter into them then into women.

Q. VVhy are not old men so much subject to the plague, as young men and children?

A. They are cold, and therefore their pores are shut up, and not so open as in youth; and therefore the infecting air doth not penetrate so soon as when they are open, as in youth, by reason of their heat.

Q. VVhat is the reason that lime is set on fire, and on a greater heat, by casting water on it?

A. Lime is hot of nature, and therefore when water is cast on it, it fleeth from the cold, and by uniting its force, gathereth a greater heat and strength, and so is set on fire. And that is also the reason that a candle doth burn faster in the winter then in the summer: for then, by reason of the encompassing cold, the heat uniteth it self, and gathereth the closer to the tallow or wax, and so doth consume it the faster.

Q. VVhy do we cast water into a mans face when he swooneth?

A. Because that through the coldnesse of the water, the heat may run to the heart, and so give strength.

Q. VVhy are those waters best and most delicate, which run towards the sun-rising?

A. Because they are soonest stricken with the sun-beams, and made pure and subtil, because the sun hath them longer under him, and by that means takes away their coldnesse, and other grosse vapors which they take off the ground they run by.

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Q. Why have women such weak small voices?

A. Because their instruments and organs of speaking, by reason they are cold, are small and narrow; and therefore receiving but little air, causeth the voice to be small and effeminate.

Q. Whereof doth it proceed, that want of sleep doth weaken the body and the brain?

A. Much watching doth ingender choler, the which being hot, doth dry up and lessen the humours which conserve the brain, and the head, and other parts of the body.

Q. Whereof doth it proceed that vinegar doth stanch blood?

A. It proceedeth of its cold vertue; for all cold naturally is binding, and vinegar being cold, hath the like property.

Q. Why is the sea-water saltier in summer then in winter?

A. This proceedeth from the heat of the sun, seeing by experience that a salt thing being heated, becometh more salt.

Q. Why is smoke contrary to the eyes?

A. Because in the eyes there is a delicate and pure crySTALLINE humour; and the eye is also cold, and without any colour at all, and the smoke is grosse and hot, and by that means doth pierce the humours of the eyes, and hurt them. And if the eye had any colour in it, all things set before it would seem to be of the same colour. And because the eye is cold, and the smoke hot, it doth cause the vapours which are contained in the eyes to drop and distil, which is hurtful for the eyes.

Q. Why do men live longer in hot regions then in cold?

A. Because they are more dry, and by that means the natural heat is better conserved in them then in cold countries, because the cold doth extinguish the heat.

Q. Why is well-water seldom or never good?

A. All water which standeth still in its spring, and is never heated with the sun-beams, is very heauey, and hath much earthly matter in it; and therefore wanting the heat of the sun, is naught.

Q. Why do we sleep better and more at ease on the right side, then on the left?

A. Because when we lie on our left side, the lungs do lie upon and cover the heart, which is on that side under the pap. Now the heart, the fountain of life, being thus occuppied and hindered with the lungs, cannot exercise its own proper

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operations, as being overmuch heated with the lungs lying on it, and therefore wanting the refreshing of the air which the lungs do give it, like the blowing of a pair of bellows, is choked and suffocated: and lying on the right side, the inconveniences are avoided.

Q. Whereof doth it proceed, that the holding of the breath doth cause yexing to go away?

A. Because the holding of the breath doth heat the internal parts of the body, and this heat chaseth away the yex, being nothing else but a cold air within the body.

Q. What is the reason that old men sneeze with difficulty?

A. Because through their coldnesse their arteries are very narrow and close, and therefore the heat is not of force to expel the cold: for I think sneezing is like the combat in the air made by thunder, which is caused of heat and cold.

Q. Why doth a drunken man think that all things do turn round about him?

A. Because the spirits which serve the sight are mingled with vapours and fumes of the wine: and then the over-much heat causeth the eyes to be in a continual moving; and the eye being round, causeth all things about it to seem to go round.

Q. Whereof doth it proceed, that the bread which is made with salt, is lighter then that which is made without it, considering that salt is very heavie of it self?

A. Although bread be heavie of it self, yet the salt drying it, doth make it light, by reason of the heat which it hath, which heat doth dry: and the more heat there is in it, the better the bread is, and lighter, and more wholesome for the body.

Q. Why is not new bread good for the stomack?

A. Because it is full of moistnesse, and thick and hot vapors, which do corrupt the blood. And hot bread is blacker then cold, because heat is the mother of blacknesse, and because the vapours are not gone out of it.

Q. Why doth lettuce cause a man to sleep?

A. Because they do ingender grosse vapours.

Q. Why do the dregs of wine and oil go to the bottom, and those of hony swim uppermost?

A. Because the dregs of wine and oil are earthy, and no way purged before, and therefore being of the nature of earth, do

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go to the bottōm: but honey is a liquor which cometh from the stomack and belly of the bee, and was there in some sort purified and made subtil, and by that means that which remaineth is light and hot, and therefore goeth upward.

Q. Why doe cats eyes and wolues eyes shine in the night, and not in the day?

A. The eyes of these beasts are by nature more crySTALLINE then the eyes of other beasts, and therefore do shine as they do: but the brightnesse of the sun doth hinder them to be seen in the day-time.

Q. What is the reason that some men, when they see others dance, do the like with their head, or feet, or by some other gesture of the body?

A. The answer is, because the sight having carried and represented unto the minde that action, and judging the same to be pleasant and delightful, and therefore desiring it, the imagination draweth the likenesse of it in conceit, and stirreth up the body to these gestures.

Q. Why doth much sleep cause some to grow fat, and some lean?

A. Those which are of hot complexion, when they sleep, do consume and digest the superfluities of that they have eaten, and therefore become fat. But such as are of good complexion, when they sleep, are much more cold, and so digest lesse.

Q. How or for what cause do we suffer hunger better then thirst?

A. When the stomack hath nothing to consume, it consumeth the flegm and humours which it findeth most ready and most at hand; and therefore we suffer hunger better then thirst, because the heat hath nothing to be refreshed withal.

Q. Why doth the hair fall after a great sicknesse?

A. When the sicknesse is long, or an ague, the humours of the head are dried up through over-much heat, and therefore wanting nourishment, they fall.

Q. Why doth the hair of the eye-brows grow long in old men?

A. Because that through their age, the bones of the eye-lids are thin by reason of want of heat, and therefore the hair doth grow there by reason of the rheumes of the eyes. The like doth happen in such as imagine much, because that with their heat they draw many humours to the forepart of the head, where the imagination is placed.

Q. Whereof proceedeth gaping?

A. Of

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A. Of grosse vapours which occupie the vital spirits of the head; and the senses are cold, and make men ready to sleep.

Q. *What is the reason that some flowers do open with the sun rising, and shut with the sun setting?*

A. Cold doth close and shut, as hath been said, and the heat of the sun doth open and enlarge. Some do compare the sun unto the soul in the body: for as the soul giveth life, and when it departeth, death followeth: so the sun doth give light, and vivificate all things; and cold bringeth death, and withering, and decaying of all things.

Q. *Why doth grief cause men to grow old and gray?*

A. Age is nothing else but a drinesse, and want of humours in the body: grief then causeth alteration, and alteration heat, and heat drinesse; age followeth immediately, and graynesse.

Q. *Why are gelded beasts weaker then such as are not gelded?*

A. Because they have lesser heat, and by that means lesser force and strength.

Marcus Antonius Zimaras Sanctipetrias his PROBLEMS.

Why is it esteemed, in the judgement of the most wise, the hardest thing of all to know a mans self?

Is it because nothing can be known, if its form and perfection cannot be known? to know the form and perfection of a mans self, as it seemeth unto the Philosopher, is a matter hard enough. And a man, by the authority of *Plato*, either is nothing, or if he be any thing, he is nothing else but his soul. Or is this because it cannot be done but by a reflected action? and to reflect and look unto himself, is a token that he is separated from the flesh. For he who would know himself, should be drawn from sensible affections: and how hard this is, no man is ignorant. Or is it because a man liveth by understanding? But the understanding of a man cannot conceive himself, but after the understanding of senses, which is very hard.

II. *Why was Socrates esteemed the wisest of all Greece, by the Oracle of Apollo, seeing that by the opinion of Aristotle, he was*

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conversant and busied onely about morality, and nothing about nature?

Whether is it because it is more expedient for the common commodity and use of men to live well, then to contemplate? Or because it seemeth to Plato that was usually professed of him everywhere, *I know that one thing, that I know nothing?*

III. *Why do men especially contend and strive in things of wit?*

Is it because they think that other things which are called goods, are in the power of another; as the gifts of the body are Nature's, and external and worldly goods are subject unto the rule of Fortune: whereof it cometh to passe, that every man can easily suffer himself to be overcome in such things, as things not happening through his fault or occasion: but they think wit to be in their own power? Or is it because they think that the goods of the minde do excel all other goods, and therefore do think it is a thing most natural to contend for that which is most excellent? Or is it because it is a common disease of all men, as it seemeth unto a certain wise man, That every man doth think himself more learned then he is, and therefore doth desire to perform that which he believeth without study and labour.

IV. *What is the cause that few men take pains in attaining of Sciences, seeing that all men by nature desire to know?*

Whether is it because the gods have put vertue to be gotten with sweat and labour, as *Hesiodus* saith? Or because the pleasures of the body do draw a mans minde from the searching out of the truth? Is it requisite for him who desireth to live in minde, that he think and meditate on the earth of the body, as the divine Plato doth think? Or is it because the nature of a man is forced to serve many ways, as it pleaseth *Aristotle*; whereof it falleth out, that when things necessary do fail, the natural desire is not brought into action? For Nature of herself is able to contemplate.

V. *Why do men say that Philosophy is naked?*

Is it because truth is naked, and that there needeth no colour of words when we handle a matter of truth? for it belongeth to Sophisters to dispute of terms, when the sincere truth is sought. Or is it because they do not play the Philosophers well, which seek Philosophy for gain and ambition, and not for herself? Or is it because he should be void from all worldly affections,

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ons, who desireth to endeavour himself in the study of Philosophy? For as *Aristotle* doth say, The soul is made wise by rest and quietnesse. And it were easie for Philosophers to become rich, if they would, as it appeareth by the example of *Thales*.

VI. *Why do men desire to be had in memory after their death; and therefore some make Pyramides, Statues, Images, and divers other tokens and monuments, which they build and leave behinde them?*

It is because all things, as it seemeth unto *Aristotle*, do desire to participate of some perpetuity and divine being, as much as they can; and therefore if they cannot remain in nature and being, yet they endeavour at the least to continue this opinion and conceit of men: or else hath custom brought it in so, to stir up such as come after, to the end they should not degenerate from their parents.

VII. *What is the cause why mens desires grow without measure about Fortunes goods?*

Is it because natural desires, as *Seneca* saith, have an end, and such desires which proceed of a false opinion, have nowhere to end?

VIII. *Why do Poets always assigne and appoint some wise men to be familiar with Princes? as Homer doth Nestor with Agamemnon; Euripides, Tiresias with Creon; Hesiodus, Prometheus with Jupiter; and Maro, Achates with Æneas.*

Is it because that by the law of nature, as *Plato* doth say, wisdom and power should direct our actions to one end, and effect the same thing, love it and seek it.

IX. *Why doth Homer when he makes mention of Ambassadors, talk always of the Embassie of a Commander in bare words?*

Is it because it is the duty of Ambassadors to declare the bare will of the Commander, and put his sentence in execution? And therefore it is certain he should adde nothing, nor take away nothing. Or else is it because the commandment of him who doth rule, that is, of a wise man, is set in good order, and is presumed to be most perfect? And therefore these should be nothing changed, but his Decrees and Constitutions are to be judged absolute and perfect.

X. *Why doth Aristotle use exceeding brevity in most hard matters?*

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Whether it is because it is the custome of wise men to load their words with sentences : or else to the end that he would be obscure, to fear and keep off rude wits from the reading of his works, as it seemeth to the expositors ? Or whether is it because that in a hard matter, and in matter of truth, many words are suspected, because that truth doth consist in a few words ? Or is it because as it seemeth unto the wise man, In many words there is error often committed ?

XI. *Why do famous men in any science, when they do erre in any matter, erre more dangerously then those which are lesse famous ?*

Is it because that such, trusting to the skill of their own wit, are drawn far from their senses, and therefore must needs be deceived ? *Avicen* may serve for a proof of this, who for all his fame in philosophy, said, That a man might naturally be brought forth of the earth. And that famous great *Averrois*, who thought that a maid might conceive with child in a bath, without knowledge of man.

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Q. *Why is a man, who is indued with learning, the most unjust of all living creatures ?*

Whether is it because with his wit and conceit he is much given to pleasures, and therefore he doth seek out greatly, and weigh what felicity is ; which no man can obtain but with injury ?

XII. *Why do men desire rather to seem, then to be and not seem ?*

Is it because man onely is participant of honour ? whereby it cometh to passe, that every man desireth to seem good, and yet naturally fleeth labour, though we get no virtues but by labour. Or is it because the property of a Sophister is rather to seem, then to be and not seem ? But there are very few which truly attain unto vertue.

XIII. *Why do some in their youth beget girls, and in their middle age, or when they begin to grow old, beget boyes ?*

Whether is it because the seed waxeth cold in such as use the act of carnal copulation too oft ? And therefore in their middle, or when they grow old, not using it so much, their seed is hotter, which is the begetter of males ?

XV. *Why have children and boys pleasure in the act of venery, seeing they do not cast forth any seed ?*

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Is it, as the Philosopher saith, because there is a certain tickling and itching in the letting forth of the spirit of breath, as it is in such as are of age by the casting out of seed.

XV. *Why have they the lesser pleasure, which use this act of copulation oft?*

Whether is it because by often using carnal copulation, the spirit and seed doth decrease and wax cold? And therefore the seed is not so itching nor so tickling, which is the cause of delight, as Philosophers affirm.

XVI. *Why doth immoderate carnal copulation more hurt then immoderate letting of blood?*

Whether is it because the seed is fuller of spirit, and nutriment better disposed and prepared for the nature of the body, then the blood? For as it seemeth unto *Galen*, the seed is the cause of the substantial parts of the body, and of it the body doth grow, increase, and is nourished. And as he who is hungered is hurt more by the taking away of bread then of flower; so the body is more weakned by the taking away of seed, then by the evacuation of blood.

XVII. *What is the reason that such as have a very long yard cannot beget children?*

Whether is it because the seed going a long distance, the spirit doth breathe out, and therefore is cold, and unfit for generation?

XVIII. *Why do such as are corpulent cast forth little seed in the act of copulation, and are often barren?*

Is it because the seed in such passeth into the nourishment of the body? And for the same cause, corpulent women have but small store of flowers.

XIX. *Why are women apter to the act of venery in summer-time, and men in winter?*

Whether is it, as it seemeth unto the Philosopher, because at that time their stones hang downward, and are feeblener then in the winter, seeing it is necessary for him who will use carnality to draw them up? Or is it because hot natures do boil and chafe in summer, and decay; and cold natures do become lively? For a man is hot and dry, a woman cold and moist: and therefore in that season the strength of man doth decay, and the strength of women grow stronger and livelier through the benefit

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nefit of a contrary quality. And for the same cause, as *Galen* saith, some beasts of a cold nature do almost die in dens and holes through the excessive cold of the air, and do receive little nutriture at all, which revive again when heat cometh.

XX. Why is man the proudest of all living creatures?

Whether is it by reason of his great and strange knowledge? for as the Philosopher saith, all sensible things consist in sense, intelligible in the understanding: what remaineth then that escapeth his knowledge? Or is it because he seemeth to be the knor and fastening together of God and the world? For he is in the middle betwixt both. Or is it because he hath rule over all other creatures, and all things seem to be brought into his arbitrement? Or shall I answer, That the pride of man doth proceed of the want of knowing himself? For truly, if he would remember that he is conceived like unto dung and urine, if he would mark how he is brought naked into the world, if he would weigh how he doth lead his life in misery and toil, if he would think deeply how he is bound to die, he would not be proud at all.

XXI. Why doth man especially understand one thing, and do another?

Is it because there is the same science of contrary things? or because the office of the minde is to reach unto many things, and the appetite tenderth unto one thing onely? And so a man for the most part doth love by understanding and reason, and beasts are led with appetite, anger and pleasure.

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Q. Why is a man wisest of all living creatures?

A. Whether is it because he hath a very little head in respect of the proportion of the body; as it seemeth unto the Philosopher in his Problems? Or is it because he is of a most perfect nature, and therefore the habits of vertues are more excellent with him? Or whether is it because the blood of a man is most subtil, and pure, and clean? The blood is the nutriture, and that the last nutriture, and therefore there is great difference whether it is cold or hot, thin or thick, troubled or cleer. Or is it by reason that through his own constitution he hath a most perfect sense of feeling, as experience doth shew in men? For because they have soft flesh, they are indued with a sharp and quick wit: and they whose flesh and skin is thicker and

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grosser, are dull and slowe. And therefore the temperature of a man seemeth most fit and apt for prudence and wisdom. And by that reason, that in a soft body and tender, the first and mo-
sherly spirit of the soul is easilier infused, and doth more wil-
lingly and speedily discourse: and contrariwise, the hardnesse
and thicknesse doth stop, and therefore is a hinderance that the
pure and clean blood, whereof the spirits are ingendred, be not
carried from place to place: for unto every man is given a cer-
tain portion of spirit to work withal.

*XXII. Why is a womans wit unapt in good things, and most prompt
in naughty things, as Euripides saith in Medea?*

Whether is it because of a privation which seemeth to be
coupled and joyned with her nature? for as it doth appear unto
a Philosopher, a woman is a mans hurt; and the condition of
a privation, is always to go about hurt, and intend mischief.

*XXIII. Why do men say, that a womans first counsel should be
chosen?*

Is it because (as we see in things which want reason) their
actions and motions are guided and directed to their proper
ends by a superiour power? For I think that to be most true
which is said, that there is a Providence which doth cast into
an dishonest heart the desire of honesty, and in a poor man the
desire of wealth, as far as is sufficient. So the understanding of
a woman, although they understand not the reason of good
and evil, is sometimes directed by an infallible truth, to take
some things in hand: but the counsels which they go about
through their own searching, are to be left off, as weak, and
subject to many errors.

*XXIV. Why do women desire rather to go trim and deck them-
selves, then men?*

Is it because the nature of women is imperfect; and there-
upon they endeavour to supply the want of nature with the be-
nefit of art? For by nature that which is evil-favoured and un-
seemly, doth cover and desire that which is fair and honest.
Or is it because that wanting the beauty of the minde, they are
forced to study how to trim and deck their bodies?

XXV. What is the cause that a tall man is seldome wise?

Is it because the largenesse of his body doth proceed of ex-
cesse of heat, and abundance of humidity? But wise men do
think,

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think, that the perfection, accomplishment, and goodnesse of our operation is perfected by driness, which doth always go on and increase until it bring us unto our end. For the constitution of the body from its first beginning did spring from the least humidity; but the vehemency and excesse of heat doth overthrow the judgement and quietnesse of minde.

XXVI. *Why is a multitude of Princes or Rulers naught, as Homer saith?*

Is it because that if the government should be turned into tyranny, it is better to be under the yoke of one, then of many? Or because a multitude of rulers do seldom look to the good of the Common-wealth; whereof it proceedeth, that if one do disagree, great hurt is like to hang over the communalty? It is easier for one man to be well given, then many. In the government of many, there wanteth not strife, debate and envie: And therefore seeing that experience doth teach, that a kingdom will not receive two, it is most truly said of *Aristotle*, That a multitude of Rulers are naught, and therefore let there be but one Prince.

XXVII. *Why have beasts their hearts in the midst of their brest, and man declining somewhat towards the left side?*

Is it because it should moderate the cold of that side? for as *Aristotle* doth say, man onely hath the left side cold. Or is it as the Physitians do say, because it should give place unto the liver, which is placed in the right side?

XXVIII. *Why doth a woman love that man exceeding well who had her maiden-head?*

Is it because that as the matter doth covet a form or perfection, so doth a woman the male? Or is it by reason of shamefacednesse? for as that divine *Plato* saith, shamefacednesse doth follow love. It is reason that she love and esteeme of him who loosed the bond of her credit and shame. Or is it because the beginning of great pleasure doth bring a great alteration in the whole, because the powers of the mind are greatly delighted, and stick and rest immoveable in the same? And therefore *Hesiodus* giveth counsel to marry a maid.

XXIX. *Why are the nights in the full-moon somewhat warm, seeing that according to the Mathematicians, the moon is cold by nature?*

Whether is it because the opinion of the Peripateticks is to

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be preferred, which saith that every light doth heat, in that respect that it is reflected.

XXX. *Why are the nights in Autumn colder then in Spring?*

Is it because the air is then very thin; and bodies which are rarified, are very apt to receive heat or cold? as it is easily seen in water; for water heated doth sooner freeze then cold water, because it is rarified with the heat.

XXXI. *Why are our bodies sooner hurt with cold in the Autumn then in the Spring?*

Is it because the bodies which are accustomed to cold, do in the Spring-time come to heat? and therefore the moving or mutation is natural, and not sudden? But in Autumn they hasten from heat to cold, not being accustomed, and without any mean. And nature doth not endure sudden change, as Galen saith.

XXXII. *Why are men full of hair, prone and apt to the lust of the flesh?*

Whether is it because in them is presumed to be great store of excrements and seed, as it seemeth unto the Philosopher?

XXXIII. *What is the reason that men which have a small head, are naturally angry and testy?*

Is it not because that when the head is little, and the brain by consequence, the heat of the heart cannot be moderated with the heat of the brain as it ought to be? And anger doth proceed of the boiling of the blood about the heart, through the desire of something which doth grieve and make sorry.

XXXIV. *Why doth a man hold fast together and close his fundament after he hath made water?*

Whether is it because the air doth run presently to fill that which is void, and therefore the parts of the body are altered immediately with the coldness of the air, and do quake and tremble.

XXXV. *Why have some men died through grief and sadness, and some through joy, and more for anger?*

Is it because joy doth cool the very inward guts; grief and sorrow do suffocate and kill the inward parts, and cool the outward; anger doth heat both? Whilst heat doth remain, the life and nature remaineth, because the soul is said to be life in natural heat.

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XXXVI. Why doth the voice change in men and women when they begin to have seed?

Is it because heat is the beginning of veins and blood, as Aristotle saith against the Phylitians? and thereupon it ariseth, that because the change of the excrements of seed is made in the highest part of the body, the voice, as being above, makes it manifest. And thereupon it is that the voices both of men and women do change when they begin to have seed.

XXXVII. What is the reason that when a pot full of boiling liquor is seething over, yet the bottom is cold?

Is it because the hot vapours ascend upward? and therefore when the uppermost water is hot, the bottom in the mean space is cold, by reason of the coldnesse of the water adjoyning unto it.

XXXVIII. Why do we finde the grain which we finde in the Ants holes, and gathered in the summer time, gnawn at one end?

Is it because they are directed of nature to gnaw and consume that end where the vertue of seeding is, for fear it sprout again; lest by their sprouting and growing, they should be deprived of their nutriture belonging necessarily unto themselves?

XXXIX. Why do children love the mothers more fervently then the fathers?

Is it because they take great pains with them? or because of the greater certainty which they have of themselves? as Aristotle saith.

XL. Why is not the father as well beloved of the son, as the son is of the father?

Is it, as wise men say, because love doth not go backward, but always forward? because love doth by nature serve such a life, to continue the kinde; whereof it cometh to passe, that our natural desire neglecting things past, looketh to things to come. Or is it (as the Philosopher saith) because the father hath somewhat of his in the son, the son nothing in his father?

XLI. Why do children for the most part rather resemble the mother then the father, seeing (as Aristotle saith) the matter doth not concur actively to the begetting of the childe?

Whether is it because all similitude and likeness in mankind and nature, are virtually contained in the seed of the father? Whereby it is that for the most part the son is like neither,

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but the grandfather or great grandfather ; and sometime like none of the family. Or is it because this doth proceed of a strong imagination ? For such are wont wonderfully to love their wives. For, as *Avicen* doth affirm, the body is somewhat changed by affections, which are called *affectus animales* : for they do print deep impressions in natural things, as it doth happen that the childe doth represent him whose portraicture and image was fore-conceived in the act of carnal copulation of the women and of the men. But some of the vulgar sort, who know not the causes of things, are not contented with this doctrine ; but the wise agree and consent unto it. And therefore it cometh also to passe, that the blood runneth and goeth to the external parts in him who casteth conceits in his minde of red things. And so mens teeth are on edge when they see another eat sowre things : and when we see another diseased and grieved in any part, the same part in us doth both languish and grieve : and often also the constitution of the body is changed through excessive fear.

XLII. *Why are asses more nimble, as the proverb is, when they are young, then any other time ?*

Whether is it because their nature and constitution being melancholy from the beginning, it is requisite there should be a temperature, with the recompence of contrary qualities ? for melancholy by nature is cold and dry ; but when they are yong, they are hot and moist. This we also see in melancholy children, the which in their childhood are of great wit, and before it be looked for, are of great wisdom, so far forth that you may hope and promise any thing of them in time to come ; whose wit neverthelesse in progresse of time doth decay and fade. Be therefore (saith the Greek) naught, to the end that thou maist live ; for the nature of such is most short.

XLIII. *Why be there no asses in Pontus and Scythia ?*

It is because their nature is most impatient and cold, as the Philosophers do say.

XLIV. *Why are Clergie-men and women most covetous ?*

Is it because the habit of vertue is bred of many actions ; and therefore seeing that Priests want wife and children, they are forced no ways to spend their goods, and yet are accustomed to take and receive, and so become covetous ? For as the Philosopher

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 sopher doth say, Such as every mans actions are, such doth he become. The nature of women (as we have often said) is imperfect, therefore they think it impossible fully to satisfy themselves; and therefore they gather together and keep, that by that means they may help their need; and by industry and art they covet to get that which nature doth not give them. And for the same reason (I suppose) old men give themselves to covetousnesse; for wanting and being destitute of helps by age and nature, they gape after the goods of Fortune, that with them they may resist and oppose themselves against all wants.

XLV. *Why do wounds grieve lesse in war then out of war?*

Is it because the powers of the soul bend another way? for as the Philosopher doth say, If our minde be strongly fixed on other matters, we do not see those things which are before our eyes. Or whether is it by reason of anger, which, as wise men say, doth heat the internal and external parts? And as *Aristotle* affirms, with heat the soul works all things: and therefore it happeneth that the angry man grows cold but slowly after his wound, and therefore also doth lesse grieve, and late.

XLVI. *Why do we wonder at an eclipse of the sun and moon, and not at all at the generation of plants, and beasts by seed?*

Whether is it because our admiration ceaseth in things which are usual, and our minde neglecteth to search out the truth in such things? But that which happeneth seldom, doth stir us up to wonder, and induceth the understanding to search out the cause of it.

XLVII. *Why doth the head ach, and dulnesse of memory, & an evil disposition of the imagination, follow the long detaining of the seed?*

Whether is it because it doth hinder and make heavie the brain by excessive of seed? Or else because the seed long kept getteth some venomous quality, and therefore the fume and vapour of it doth hurt the head?

XLVIII. *Why do Priests and Monks fear and abhor death more then any men?*

Is it because they are by nature cold and melancholy? Or because they perceive themselves to perish utterly? For when they are out of this world, they neither continue in their own nature, nor in posterity.

XLIX. *Why if trees fall their leaves, and beasts their hairs and*

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thers, they receive them again; and if a man become bald, his hair cometh no more?

Whether is it because the time of the yeer doth bring that change of bodies, so that in the first change there followeth an interchangeable course one after another; and beasts receive again their feathers and hair, and trees their leaves? but baldnesse cometh to man through age, and nature giveth no coming again to age.

L. Why doth a summer end all diseases?

If force and nature be strong, it shall finde an air most fit for resolution and digestion, and expulsion of superfluities; if weak and overthrown, the heat doth overthrow it more: it doth loose weak bodies, and therefore there cometh nothing unto the sick body but death.

LI. Why, if a man put his hands into water in summer, is he colder when the water is moved, then when it standeth still?

Whether is it because the parts of the water which touch his hands, be hot by the heat of his hands? For every agent which doth communicate with the patient in the things whereon he worketh, in doing doth suffer again; and the water being moved, it is necessary that the parts of it which are rarified, be scattered abroad, and others more cold succeed them.

LII. Why do some which have an evil complexion and constitution of body, live longer then some others which are of a sanguine and better nature?

Whether is it through his bad government and order? Or because there was some hidden cause in those dispositions? for as *Averrois* saith, the number of the elements is infinite in the works of nature, the which none beside the Author of nature doth understand.

LIII. What is the cause (as Physicians say) that the suffocation of the matrix, which happens to women through strife and contention, is more dangerous then the detaining of the flowers?

Whether is it because that by how much the more an excrement is perfect so long as it doth continue in its natural disposition, by so much the more it is worser, when it is removed from that, and drawn to a contrary quality? As it is seen in vinegar, the which is sharpest which is made of best wine. And so it happeneth, that the more men love one

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the other, the more they hate when they fall at variance and discord.

LIV. Why doth the land which standeth still, seem to move unto such as sail on the sea?

Is it because the instrument of the sense of seeing is accidentally moved when the ship is moved, whereby the likeness and similitude of things perceived are received with the moving?

LV. Why do we love our sight above other senses?

Whether is it (as Aristotle doth say) because it doth shew us the differences of things, or because its knowledge is more drawn from material substance? Or is it because the divine force of love is placed in that sense, as Plato saith?

LVI. Why do we not judge a staff to be broken in the water, seeing it doth so appear in the sense of sight?

Whether is it because we perceive by the sense of feeling and touching, that the sight doth erre? Or is it because we do not judge with the same power as we do imagine with? And an argument of this is, because the sun doth seem to be but a foot round. And by a trick and moving of the fingers, one finger doth seem two, and yet we do not yeeld that they be two.

LVII. Why do we put our hands over our eyes, when we will see any thing as far off?

Is it because the sight should not be dispersed? and so Aristotle saith, that those that have their eyes standing out cannot see far: and contrary, such as have them hollow in their head, can see far, because the moving of the sight is not scattered.

LVIII. Why can some see the object before their eyes as far off, better then if it be neerer to the eye?

Is it because things which may be seen, cannot be seen but by the mean of the bright air? and weak eyes do want more plenty of light then strong eyes. But the object being put off far from the sense of the sight, in the distance from the thing seen, doth require a greater light then good eyes need; and the further the object is, the more light there is in the distance betwixt the object and the sight. Or else because the motion which proceedeth from an object far distant unto a weak sense, is weak, which the sense can well endure?

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but the motion which is hard by, is strong, which a weak eye cannot suffer; which is easily seen in old men, which by reason of their weaknesse do see afar off, and can read small letters in the light of the sun, which notwithstanding cannot hard by them see, nor read at the light of a candle, nor the moon.

LIX. Why can some see things hard by them, and cannot see things afar off?

Is it not through the weaknesse of their sight? for in such the power of seeing is very weak, and not united together, and therefore they had need of a strong moving; as it is also in such as have their eyes standing out, which cannot see far.

LX. Why do such as would shoot aright, wink with one eye?

Is it because the power of the sight is then more, and better united, and therefore is better to perform his action?

LXI. Why be such as have been long in the dark, if on a sudden they come into great light, half blinde?

Whether is it because nature cannot endure those sudden mutations? or else because the spirit of the sight is small and weak, and therefore is glad of the like, and is dissolved when they come into the light? Or else is it because of the desire of the light which they wanted a long time, they do behold the light too earnestly, and so their sight is weakned; as it happeneth in such as have a long time endured famine, and therefore eating greedily, do take more then they can digest, and so by that means perish.

LXII. Why do such as see weakly, for the most part write small letters? It is a marvel that such as are purblind, or have a weak sight, should do that which doth belong unto such as have a good sight.

Is it because things hard by do seem great, and such are wont to write with their eye hard by their paper? Or is it because they write almost winking? for if they should write with their eyes wide open, their sight being dispersed and scattered abroad, would wax dim; and therefore winking they see more quick? and therefore seeing that through their winking their passage of seeing is narrow, they must of necessity make a small letter.

LXIII. What is the reason that if a man will see far in the night, he shall do it better if he bow his head neer unto the ground, then if he stand upright?

Is it because the obscure vapours which make the air dark, are

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thicker above in the air then they are neer unto the earth, and thereupon do more hinder the sight far off in the air, then neer unto the ground? Or is it because the light of the stars being disperſed thorow the air, cauſeth a reflection neer unto the earth, although weakly, and ſo by that means doth ſomewhat the more make light upon the overmoſt part of the earth.

LXIV. What is the cauſe, that if a man have committed any evil fact, he cannot diſſemble it in his countenance and eyes? And therefore the Poet doth ſay, O how hard it is not to bewray a fault with thy countenance!

Is it because the eye is the meſſenger of the heart, as a glaſſe in the minde wherein all things do ſhine? Or is it because it is the weakeſt part of the body, and the full-eſt of paſſages? and therefore all alteration which begetteth in the heart, (which, as the Peripatericks do ſay, is the beginning of all feeling and cogitation) goeth directly unto the eyes.

LXV. Why cannot ſuch as gape, or put forth or receive air, hear well?

Whether is it because the end of the inſtrument of hearing is ended at ſome ſpiritual part, whereby it cometh to paſſe, that it is ſhaken alſo and moved together with that ſpiritual or ærious inſtrument, as oft as it doth move the air? for it is moved, when it doth move. Or is it because much breath or air doth outwardly enter in at our ears when we gape, and therefore moving and ſenſe cannot be perceived? for it doth thruſt at the ear. The noiſe is the air, or ſome affection of the air; and therefore when the air within the ear is weakned, and the air outwardly doth enter in, of neceſſity the one doth hinder the other; and that which is within, doth beat out and expel that which would come in.

LXVI. Why can nothing be the cauſe of its own generation and corruption?

Is it because the mover muſt be before the thing moved, and the ingenderer before the things ingendered, and that it is impoſſible to be before it ſelf?

LXVII. Why are womens bodies looſer and ſofter then mens bodies, and leſſer; and why do they want hair?

Is it by reaſon of their monthly terms? for with them their ſuperfluities go away, whereof hair ſhould grow, and whereof
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the flesh should be filled, and therefore they are lesser: and therefore also their veins are more hidden then mens veins.

LXVIII. *What is the reason that when we think upon any horrible thing, we are stricken with a fear?*

Is it because the conceit, thinking, and understanding of things, have force and vertue? for, as *Plato* saith, the reason of things hath some affinity with the things themselves. For the image and representation of cold and heat, is such as the nature of the things are, as the Philosopher hath said. Or is it because when we comprehend any dreadful matter, the blood runneth to the internal parts, and therefore the external parts are cold, and shake with fear.

LXIX. *Why cannot a company or multitude of women be led under a Captain without tumult?*

Is it because they are inconstant by nature? And for the same reason the Philosopher would appoint no shepherd over goats, because they are unstable and unconstant by nature. Or is it because a woman is more prating, worse tongued, and more backbiting; also complaining, and lesse wise, and more lying then a man?

LXX. *Why doth a raddish-root help digestion, and yet it self remaineth undigested?*

Whether is it because its substance consisteth of divers parts? for there are some thin parts in it, which are fit to digest meat; the which being dissolved, there doth remain some thick and close substance in it, which the heat cannot digest.

LXXI. *Why do such as cleave wood, cleave it easier in length then overthwart?*

Whether is it because in wood there is a grain, if it be cut in length, as it is to follow the hair in cloth, which doth go on in length: whereby in the very cutting, one part draweth another fast by it?

LXXII. *What is the reason, that if a spear be stricken on the end, the sound cometh sooner to one which standeth at the other end, then to one which standeth neerer to him which striketh?*

Whether is it because (as it hath been said) there is a certain long grain in wood directly forward, filled with air; but crosse, or on one side, there is none. And therefore a beam or spear stricken on the end, the air which is hidden receiveth a sound.

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found in the aforesaid grain, which serveth for the passage of the air. And therefore seeing the sound cannot go easily out, it is carried unto the ear of him who is opposite unto him, and those passages do not go from side to side, and therefore the sound cannot be so distinctly heard.

LXXIII. *Why be there not famous men in every faculty in our age?*

Is it because the nature of man decayeth in our age; and as *Solinus* saith, Succession being corrupted, the progeny of our age is worse by birth? Or is it because such are not esteemed of Princes? For take away the reward due unto vertue, and no man will embrace it. Or is it so ordained by nature, that men do always complain of the present time?

LXXIV. *Why are flatterers in great credit with Princes?*

Is it, as *Plutarch* saith by the authority of *Plato*, because they love themselves? Too much immoderate love of themselves, causeth them to admit flatterers, and do give them credit. Or whether is it, as I think, because they want the light of reason? For among birds, some through the corruption of their nature, delight in stinking meats; and whom the day doth blinde, the night doth lighten.

LXXV. *Why have Philosophers, for the most part, in these days, evil conditions?*

Is it because they are not esteemed of Princes? Or is it because that for Philosophy it self they are accused of crimes, and think therefore that they receive such rewards, and therefore they are compelled to forsake vertue, and follow vice? Or else deceived through errour, they think they have challenged all the garments of Philosophy, when they have snatched to themselves some of her rags? And therefore they are by us rather called Sophisters, then Philosophers: for certainly, a Philosopher should be of a stout courage in all respects, and in all fortune: for they reason badly, that therefore they should give themselves unto Philosophy, because they would be honoured of Princes. And their desire is not ruled by nature, but by errors, and are thrust forward with the stream of false credulity.

LXXVI. *Why do such as are angry wax pale in the beginning, and afterwards red?*

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Is it through the desire of revenge for that which grieveth, that the heat and blood are called unto the heart, and therefore of necessity the external parts are pale? When they are determined to put that in execution which they desire, the heat and blood do run unto the outward parts, and then they are greatly to be feared and taken heed of.

LXXVII. *Why do serpents want a yard and stones?*

Is it because they want thighs, and therefore do want a yard? and they want stones, because of the length of their body.

LXXVIII. *Why can serpents turn their heads backward, and the rest of their body stand still?*

Whether is it because (like unto those creatures which are called *Insecta*) they are made of a winding composition, and have their joynts flexible, and made of grittles? and this is the reason in serpents, & also because they may avoid those things which hurt them: for having no feet, and being long of body, they cannot easily turn them, whilst they bow against those things which are behinde them. It were to no purpose to lift up their head, if they could not exercise anger.

LXXIX. *Why is the Camelion changed into divers colours?*

Whether is it, as it seemeth unto the Philosopher, because he is the slenderest of all footed beasts ingendered of eggs, and is stark cold for want of blood, the cause is to be referred unto the quality of the minde? Through over-much coldnesse he is of so many colours; for it is the property of fear to binde fast, through want of blood and heat.

LXXX. *Why are the thighs and calf of the legs of men fleshy, seeing the thighs of beasts are not so?*

Is it because men onely go upright, and therefore have them so, to sustain the upper part? and therefore nature hath given the lower parts corpulency, and hath taken it away from the upper: and therefore she hath made the buttocks, the thighs, and calf of the legs fleshy.

LXXXI. *Why do very fat beasts wax old quickly, and soon die?*

Is it because they have but little blood, seeing that much of it is drunken up with the fat? And those which have but a small store of blood, are aptest to die; for death is a want of blood.

LXXXII. *Why doth man onely go upright?*

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Is it because he is most hot of nature ? or is it because his substance is divine ? The part of divine things is to understand, and be wise : which could not easily be, if a man had a great massie body ; for heaviness doth make the understanding and the sense slowe.

LXXXIII. *Why is the flesh nearest the bone sweetest ?*

Whether is it because it receiveth temperature through the quality of the contrary ? for the nature of flesh is hot and moist, and the nature of the bone is cold and dry. And therefore betwixt contrary extremes there must needs be a mean.

LXXXIV. *Why is it forbidden to talk while we eat ?*

Whether is it that before the wezan, by the which we eat and drink, the artery is put, by the which air and breath goeth into the lungs, and this artery is molested with meat or drink entering into it ? Yea, nature hath provided for this a little flap, which doth cover the artery, the which is opened when we speak. And therefore meat can easily get into it, whereof followeth choaking and coughs. Or whether is it because speaking doth hinder the chewing of the meat, and therefore the meat is not well digested ?

LXXXV. *Why doth wine mingled with water, after a sort make a man soonest drunk ?*

Whether it is because the water doth cause the wine to run hither and thither, and penetrate the more. And that is the reason that Must, as *Avicen* doth say, doth sooner make a man drunk then wine ; because that the water mixed with it, doth make it penetrate.

LXXXVI. *Why are noble-men, and such as are placed in high dignity, troubled with the Gout ?*

Is it because they cram divers sorts of meats, even to the full ? And the Payfician doth affirm, that there is nothing worse, then at one time to take divers sorts of meats, and then to be a long time in eating and drinking of them : for the first is half digested before the other come, and therefore such as remain not long undigested, breed raw and naug'ty humours, which run unto the joynts. Or whether is it by reason of over-much pure wine, and too much idlenesse, and exercises done out of due season ? Or is it through the over-much use of lechery, which wasteth and killeth digestion ?

These things are greatly to be feared, as *Plotinus* saith, lest we become stocks or brute beasts : for like unto brute beasts, they are given to gluttony and the belly.

LXXXVII. *Why are they taken with sudden death, which are loaden with over-much fat, and especially when they are young ?*

Whether is it because their veins be strait, and therefore are stopped with the fat, that the spirits cannot have free course ? whereupon the heat which is bred within them, doth kil them, because they cannot receive the cooling of the air. And therefore (as the Physicians do say) they should greatly fear lest their veins break, or their natural heat be suffocated.

LXXXVIII. *Why can such be hardly let blood, which are very fat, and that with danger ?*

Whether is it because they have very slender veins, and those hidden ? Or else because all fat is without blood, as it seemeth unto the Philosopher ?

LXXXIX. *Why (as Aristotle doth affirm) are the sensible powers in the heart ; yet if the hinder part of the brain be hurt, the memory payeth for it ; if the fore-part, the imagination ; if the middle, the cogitative power ?*

Whether is it because the brain is appointed by nature to cool the heat of the heart ? Whereof it is, that in divers of its parts, it serveth the powers and instruments in the heart : for every action of the soul doth not proceed from one measure of heat.

XC. *Why doth it happen for the most part, that children which are not lawfully begotten, are wittier, and subtiller, and liker unto the parents then other ?*

Whether is it because the powers of the minde of the parents are very vehemently bent in the act of carnal copulation ? Such do love exceedingly, and therefore seeing that their affections be not distracted, the childe by nature shall not vary from them. And this is most true when they go together with tranquillity of minde : for if it be with fear or grief, the children be unlike.

XCI. *What is the reason, seeing death is by nature, yet it is more terrible unto men then unto all other living creatures ?*

Whether is it because the nature of man, as the Philosopher saith, hath purchased the mean, not onely of living, but also of

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of well living? For mankinde onely is partaker of supernatural things; other living creatures have regard unto that onely which they see; wherein, as *Pliny* doth say, the goodnesse of nature doth suffice, which is to be preferred to all other things: and therefore they think not of glory, wealth, ambition, nor of death. Wherefore seeing that a man is deprived of a more noble life when he dieth, death is unto him above all other most grievous. Or is it because other living creatures regard onely things present, and man onely foreseeth things to come?

XCII. Why if death come by nature, it is judged the last of all terrible things?

Whether is it, as it seemeth unto the Philosopher, because it is the last, and that nothing else doth seem good or bad unto mortal men? Or is it because we inveigh against nature, who is the beginning of necessity; and not the nature of the form of the end, from which that which is good is derived, which all things do desire? Or peradventure, doth death seem the most terrible of all things, because they meant so to live, that they thought to be immortal? Or doth it strike a fear onely unto them which live a naughty life? For unto such as live a vertuous life, death is not grievous, as the Poet saith, Death is the end of a prison obscure. Or be they grieved because they are seized on with a violent and untimely death? For such as die when they come unto old-age, do for the most part die without fear and grief: for truly, nature is as a candle ready to be put out. And as *Plato* doth say, Of all sorts of death, that which by nature doth come, is most light, which happeneth rather with pleasure then dolour.

XCIII. Why, seeing that a man is the end of nature, is he of so short life in respect of other living things, as Poets do complain by the example of the crow?

Whether is it because that those our makers consulting of our kinde, the perfection of frail things is not measured at all by continuance of time? As the Philosopher saith, It is far better to be very joyfull for a short space, then a long time meanly or lightly glad. Or whether is it because that nature of things possible doth always make that which is best? And it could not be that the constitution of mans body could be conveni-

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ent and fit for long continuance, and the operations of the soul : For by the authority of the wise, there is required another temperature ; first for life, and then for the works of life. Whether should they make us of a long life, and the worse ; or of a shorter, and the better ? It seemeth good unto them (saith *Plato*) to prefer a short life and a good, before a long life and a bad.

XCIV. *Why did nature bring forth men naked, and without defence ?*

Is it because nature doth make nothing without reason, or in vain ? Seeing that a man is most wise, he can use many instruments to help himself withal. The hand is not one instrument, but many. And therefore they think amisse, as the Philosopher affirmeth, which say that a man is the noblest of all creatures, and yet in worse case then all, because he is naked and weaponlesse: for other creatures keep their common help, and cannot change it by any means ; but man can change his weapon at his pleasure : for the hand is a hoof, and horn, and spear, and sword, and every other kinde of weapon. Seeing then that a man is indued with understanding, and hath a hand given him by nature, he cannot complain of his nakednesse and condition. Whether was the excellency of the substance of which mankinde was made, fit and convenient for horns, and such like ?

XCV. *Why is wine put into a vessel of water mingled with Salt-peter, very cold ?*

Because Salt peter is presently *actu* cold, though it have power to be hot ; and the water mingled with it, is colder then the wine. Now a thing which is more cold, doth make a thing lesse cold more cold then it was: and therefore the wine put into such a vessel, is cooled the better. I have sometime answered, that it proceedeth of the *Antiperistasis*, that is, by a repulsion, whereby heat or cold is made strong, and every contrary by its contrary : But Salt-peter is not hot *actu*, but in *potentia* ; and therefore having power onely to be hot, and is not hot indeed, it cannot work by that contrariety : for it is *actu* cold, as the feeling can judge.

XCVI. *Why hath Philosophy seemed a wonderful and a divine thing unto some ?*

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Whether is it because that as a medicine is the perfection of the body, so Philosophy is the perfection of the soul, as *Themistius* saith? Or is it because the study of Philosophy doth increase and further us in our duty towards God, and make our Zeal more fervent? For those things being perfectly known which God hath done, he turneth all mens hearts and mindes to praise and admire him: this admiration Charity, Faith and Hope do follow. Or whether is it because it doth breed great pleasures and delights through the certainty and sincerenesse of it; or because it doth make us like unto God?

XCVII. *Why do tyrants hate learned men?*

Is it by reason of the unlikenesse of manners? For so it hath always been, that wisdom hath been injured by evil manners. Or do they fear lest they should breed sedition and tumults in their Cities when their doctrine had authority? Or because they do tax and reprehend their conditions? For (as *Plato* doth say) Poets have great force and skill either to praise or dispraise; and every man that hath a care of his fame, should take heed how he offend a Poet.

ALEXANDER APHRODISEUS

his PROBLEMS.

Why did Homer call man Polycrotaphus, of the hoarinesse of the temples?

Because that for the most part there gray hairs begin; because the fore-part of the head hath more moistnesse and flegm in it then the hinder.

II. *Why is onely the fore-part of the head bald?*

Because it is loose and soft. And therefore seeing the hair doth want nourishment, by reason of natural drinessse, it easily falls in those parts: it doth not stick as it doth behinde, where the head is moister and thicker.

III. *Whereof doth baldnesse proceed?*

Baldnesse proceedeth of drinessse; and therefore such as have curled hair, are soonest bald, by reason of the drynesse of their head; and are gray-headed very late, by reason of the drinessse which consumeth the superfluities of flegme: they

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are watchful above others, because sleep cometh of humidity. Children do shew this, because they are both moist and sleepy, and full of excrements. Such as have softer hair, as such be which have a moist head, are of a contrary disposition: for they are very seldom or never bald. And sometime baldnesse happeneth by some defect of the kinde or stock, as the gout, and some other diseases: such are sooner bald, and are sleepy, and have much superfluity. The hoary hairs be whitest, because they follow the colour of flegme, from whence they proceed. They be sometimes almost yellowish, when the flegme is mingled with burnt choler.

IV. *Why are cold men full of excrements, and watchful?*

They are full of excrements, because they are cold and weak by nature, and therefore digest badly, and so gather many excrements by the pores and open passages of the body. And seeing they be dry, they are also waking and watchful; and also because their bodies be hard and stiff. And children, notwithstanding the interlacing of their pores, and soundnesse of their bodies, are moist.

V. *Why have children, which are moist by nature, and full of excrements, no hoary hairs?*

Because they are moist and hot, and flegme is moist and cold, and have therefore part of the head as it were fleshy and thin, whereby superfluities are voided; and that with age doth grow hard, and bony, and thick; and therefore nature doth afterward give it seams, by which superfluous vapours should breathe out and evaporate.

VI. *Why do women and gelded men quickly grow hoary and gray?*

Women, because they are cold by nature, and have small exercise, do gather many superfluities, and especially then when their flowers cease. And gelded men, because they yeeld no seed, but do yeeld superfluity which should breed seed, the which with the blood doth spread it self over all the body, and that hath the nature of flegme.

VII. *But why do they want hair?*

Women, because they be cold, and have thick passages in their bodies: for cold doth thicken, and therefore there is no way by which hair should passe. Gelded men, because they are moist, and above measure full of excrements; and there-

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OF ALEXANDER.

therefore as no herbs can grow in such moist places, so neither in dry and stony; whereupon baldnesse doth follow.

VIII. *Why are gelded men for the most part crooked legged?*

By reason of their superfluous humidity, they have soft and wet bodies, and therefore weak; and therefore seeing the thighs cannot bear the burden of all the body, they are wreathed and crooked, as a bulrush doth bend if a weight be put on it: for that which is hard and dry, is strong, and can resist; and that which is soft and moist, is weak, and cannot resist. This is declared by wood, and oiers, and also men. Also with baths and drink men are much weakned, and with a moderate diet are dried, and become stronger unto any action: Whereof it ariseth that gelded men are after a sort women, and weak, and given to wine and drunkennesse, and full of flegme: for being cold, they covet to induce the contrary quality; and wine by nature is hot. The Ethiopians being of a drier nature, have curled hair, and are lean, and strong to work.

IX. *But why have they a sharp shrill voice?*

Again, abundance of humidity filling up the artery, doth make it strait; and therefore the breath going by a narrow passage, doth cause a sharpnesse in the voice. It is plain that they abound in humidity, because they be light, and their paps grow great like unto women, and have swelling eye-lids, and have soft white hair.

X. *Why do some gelded men after a sort covet women, and sometime love the act of venery?*

Because that some are imperfect gelded men, and some have a hot liver, and have large vessels and conduits of seed, and therefore imagine the use of carnal copulation: They cannot perform that which they desire, because their privities want livenesse; for that spirit which doth puff them up, doth always fail, and is weak: that spirit rising of the seed, through the passages of the seed, is carried from those parts which are about the loins. But in children, those conduits of the seed are stopped up.

XI. *Why, seeing there be three simple uniform humours, yet they do not breed three simple diseases, but more?*

There are double in every one, continual, or whole and

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broken : for the differences of diseases do not proceed onely of the humours, but also of the places : A hot, thin, and sharp humour, doth breed a sharp, and a short, and a hot feaver : a cold and a thick humour, a long and a dull one. So of wood, that which is hot and dry, as Bays, Olive-trees, causeth a great flame, and is quickly burned : green wet wood makes a small smokie fire, and is long a burning.

Again, if the place be large and spacious, it doth sooner, and that greatly inflame the humour, because when it is heaped up together, then it once being full rotten, is put on fire. But if the place be narrow and small, seeing it cannot contain all the humour, but by piece-meal, and therefore cannot ripen all together, it will stir up a small Fever, but such a one as shall burn long. Put then the nature of the humour unto the place, so shalt thou finde all the differences of agues, which rise of the corruption of the humours. If yellow choler do putrifie in great receptacles, as the veins and arteries, seeing it is hot, it doth kindle a most sharp, hot, and short ague, which is called a burning or heat. But if cold flegme doth putrifie in the small veins and arteries which are about the flesh, it doth cause a long and languishing ague, which they call a Quotidian. But if yellow choler do corrupt in small receptacles, it doth cause a small and a short ague ; but yet sometime longer then a heat which we call a Tertian or Sharp ague. But if flegme doth putrifie in great places, it will cause a shorter ague then a Quotidian. And likewise black choler ; if it putrifie in great veins, because it is burned almost all at once, causeth a short ague by fourths : if in small, it breedeth a long Quartane : for there do concur a cold and a thick humour not fit for alteration, and a narrow place, which will not suffer all the melancholy and anger to be consumed at once.

XII. *Why do some, when they are ashamed, sweat under the arm-pits?*

Because the pores are thin in that place : nature, when any thing is worthy of reverence and honour, doth flee with the blood into the veins and arteries; and they being full, do distill. As it doth happen to such as are merry, being their body is made thin, and especially the arm-pits.

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XIII. *Why do such as are afraid wax pale?*

Because our nature, and that power which hath a care of our body, will suffer nothing done externally unto us. And as we do run within door to keep our selves from danger; so nature looking unto her safety, conveyeth her self into the body as much as she can, and carrieth her blood with her, (whom she hath for her nourishment and waggon) and that blood also which is best, and that is the blood which doth dye our skin with a red purple-colour.

XIV. *But why do they tremble also?*

Because that *virtus animalis*, that is, certain spirits which arise about the heart, with the consent of nature, do forsake their sinews, which before they kept: and they be it which keep the body from trembling: Whereupon it ariseth, that such are loose in the belly, and unawares do make water: For those muscles and sinews which do stop the course of excrements, being become weak then, give leave for superfluities to passe.

XV. *Why do such as are ashamed wax red?*

Because nature of her self, as it were with a certain conscience, like unto a noble Virgin, reverencing that which is worthy of honour, moderately doth draw her self into the secretest parts of the body, whereby the blood is moved and poured abroad, and therefore the skin is dyed with the colour of blood. Others say, that the blood is cast over them by nature like unto a vail, as we (as it were admonished by nature) do put our hand before our face.

XVI. *Why are some dead with fear?*

Because the natural power fleeing above measure, and retiring it self with the blood into the inward parts of the body, doth choke and put out that natural livelihood which is bred neer the heart, and therefore doth bring death. By the same reason, when much oil is poured on a sudden into the flame of a lamp, it doth put out the flame: The blood which is in the heart, is compared unto the flame of a candle or lamp. Some for the same cause have died with grief: as fire covered with a cover, is put out; so the inward motion of the natural heat is resolved.

XVII. *Why are some overcome and dismayed with drunkenness?*

Because abundance of wine doth suffocate and choke with

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its heat our natural and lively vertue. And it happeneth chiefly unto those whose natural heat is weak and small. That which is strong, can much resist, and in space of time can overcome and digest the abundance; as a great flame can endure much oil to be poured on it.

XVIII. *Why do old men shake and tremble?*

Because the sinews of their natural vertue and force, and the muscles of the parts of the body, when they receive not sufficient motive vertue, do not endeavour to bear the burden of the body. The shaking is, because the weight of the body draweth some part of the body downward; and another power, which is called *animalis*, upward: when this is done without intermission, and one after another, it causeth quaking; then cometh in bowing and stooping to the ground; and so in stead of a rafter to uphold the building, they use the help of a staff: and for the same cause they void their excrements and urine on a sudden.

XIX. *Why do not pepper and mustard-seed heat the belly if they be swallowed whole, but if they be broken they do?*

Because those things which have their qualities in power onely, and not in action, want some external help to bring their vertue and power into action, and therefore being bruised and made small, and entering into the passages of the body, do work their effect through their inherent heat. And the like is of other qualities. There be some things which have their qualities in action, as the water, pilsan, and milk, which are to be drunk presently, they are moist and cold, and want no other external help to cool and moisten, but do work immediately. Likewise the salt and the earth, both virtually, and presently, and in the sight, are dry. Lin-seed and bread are dry in imagination and sight, but moist in vertue and act. The sea also, and brine, and pickle, and *aqua vite*, are moist in imagination and sight, but are dry in vertue and action.

XX. *Why do some see nothing in the night, and see in the day?*

Because they have a thick spirit of seeing, and white cannot pierce the air unto the thing which is seen; and in the night groweth more thick, because it is made more cold with the absence of the Sun. Or else, as others do say, because that in the day-time it is made fine and attenuated with

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the pure and hot air, and is thickened in the night. The contrary unto this doth happen in a Cat and an Owl ; they see nothing in the day, and see very well in the night : for they have a very clear and thin sight, the which when it doth somewhat thicken in the night-time, is most fit to receive its object in the day-time : and in a clear light, being exceedingly attenuated and made thin, is resolved and scattered. Whereupon Lions, which are almost of the like quality, cannot go in the sun ; and if they see fire in the day-time, they flee from it. A man may see the ball of their eye very bright, and they have the moist of their eyes very cleer.

XXI. Why doth a sudden vehement joy sometimes dismay a man, and astonish him ?

Because when the vital vertue and inward natural heat is immoderately carried to the outward parts, it is cast out and resolved : and therefore such sweat and grow red, because the blood is present. The natural heat and fire, both by reason of its heat, and also because it is out of its place, move upward, and then, for desire of food and nutriture, downward again. And when one of these moving, do perish and fail, the man perisheth and faileth also.

XXII. Why do such as are in grief, and in love, and in anger, sigh very often ?

Because that the minde of such as are grieved is turned into the cause of grief and sorrow ; and the minde of such as covet, to that which they do covet ; and the minde of the angry, unto that which causeth the anger. Then the mind being intentive upon that whither she moveth, doth after a sort neglect and forget to give motive vertue and power unto the muscles of the brest. Therefore the heart not receiving air by opening of the brest, and by consequence, neither blowing nor cooling, nor yet casting forth by shutting and closing, and sighing, superfluities, which are bred of the adustion of blood, whilst it doth fear suffocation ; the heart (I say) doth force the minde ; and giving warning that it would give more motion to the muscles, and cause greater breathing in and out ; and that he would take in more store of cold air, and thrust out more excrements ; and that by often

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small breathings he would perform that that one great one doth effect. And therefore men of old time called the word *suspiro*, sighing, of the straitnesse of the brest. They sigh long and often, because the minde is always upon that which causeth the passion: nature doth force the soul to send in by the heart more motive vertue to the muscles of the brest. It is most evident that we do breathe in and out by the arteries. Under the name of Pulse, the opening and shutting, the receiving and casting out breath is comprehended.

XXIII. *Why is a Sausage hardly digested?*

Because that through its lightnesse it doth swim in the belly above the moist meat, and doth not conjoyn with that meat where concoction is made, but swimming at the gizzard, where appetite is, and not digestion. If you cast it into the water out of a mans body, it will not sink, but swim above the water. For whilest meat is minced in it, it receiveth a light air, which causeth it to swim above moist things: and therefore it is limber and flaggie, because it is participant of air.

XXIV. *Why do we make hot water before we go into the bath, and after that we have been long in the bath, our urine is cold?*

And this is so in comparing it to some other. Urine is of a luke-warm quality, and moderately hot: therefore out of the bath, because our body is cold, the Urine we make, as it were in comparison, is hot: yet in the bath, because the body is much hotter then the urine, therefore the urine doth seem cold, although it be hot after a sort. The which doth appear by that, that he who goeth into the bath to get heat, if he only go into hot water, it seemeth very hot; but if already heated, to go into it, it doth not seem so hot.

XXV. *Why do we finde sweet fresh water when we dig neer the Sea?*

Because that in the sea that water which is thinnest and purest, is fresh; that which is thick, is salt: the thin water therefore which runneth thorow the passages of the earth, is hidden in the earth, the which we finde when we dig: it is fresh, because that in the winter it is drawn up into the air: the thick and dried water doth become salt: but in the sea-shores, because the passages be broad and wide, salt water is found.

XXVI. *Why is well-water warm in winter, and cold in summer?*

Because

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Because every thing doth flee from its contrary, as from its enemy. It is manifest that cold is contrary unto heat, and doth destroy it : and therefore because in summer heat doth occupie the air, the cold doth flee into the bowels of the earth, and therefore causeth the water to become cold. But in the winter, because the cold hath greater sway in the air then the heat, the heat fleeth to the same place, and so doth heat the water. For it is against the law of nature, that contraries should dwell together in the same place and time.

XXVII. *Why are men of a small stature commonly wiser then the tall ?*

Because in small men the soul is well joyned and compacted together in the whole body : in tall men it is extended in length. And therefore *Homer* doth describe *Ulysses* to be short and wise, and *Ajax* tall and a fool.

XXVIII. *Why do we cast water into a mans face when he doth swoon, to make him come to himself again ?*

Because that through the coldnesse of the water, the heat may repair to the heart to give strength.

XXIX. *Why do many fools beget wise and strong children ?*

Because fools when they are in the act of copulation, yeeld very much unto pleasure, and have their minde drowned in the body ; whereby it cometh to passe, that their seed being participant of great vertue, as well reasonable as natural, doth cause such as are begotten to be wiser. But it happeneth otherwise unto such as are wise and learned : for their seed wanteth much natural vertue, and the force of wisdom maketh them to think on some other external cares, which weakneth their intention in the act of Venery.

XXX. *Why doth not the dung of wilde beasts stink so much as the excrements of men ?*

Because they use dry and superfluous meats, and have great exercise : yea, the dung of some beasts are of a good savour. But of all other, the dung of a man doth savour worst, because men doe use many moist meats out of season, and more then is needful. Also they are lesse hot then other living creatures, and not so much exercised ; and therefore seeing that it is not full digested and evapourated, by reason of the abundance, but doth corrupt, therefore it is of a bad savour.

XXX. *Why*

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XXXI. *Why doth mustard, and such like sharp things blister, and exulcerate the skin if it be put on it, and when it is swallowed doth not exulcerate the belly?*

Because they are dissolved with the moisture of the body, and because they are changed and digested before they work; and upon the skin, which is thin, they have more time to work.

XXXII. *Why doth barley-bran, seeing that it is cold, dissolve flegme?*

Seeing all cold doth make thick, and hinder resolution. Truly I think, not because it doth cool, therefore it doth loose and dissolve; but because it doth cast out, it hath a vertue of dividing and expelling humours. And there are divers such kindes which work contrary unto themselves accidentally and by chance, not principally; as the nature of bees, which are hot, do weaken an ague; not because they are hot; for the like doth increase his like: but because they do expel naughty humours from the veins, and do provoke urine. So flowers *de-luce* and hyssop are good for the Plurisie; although they be hot, yet they do cut those humours which breed betwixt the skin, and which gird the side. So the disease which is called *Tetanus*, is cured with hot water poured on it, which is bred of cold humours: it doth heal it not principally, and of its own nature, but because it is heated.

XXXIII. *Why do some men puff and blowe when they make water?*

Because the bladder, when it is full of water, doth swell, and straiten the gut which is called the right gut; and when it is emptied, a winde which is in the gut desireth passage out. Some think that there is an agreeing of those parts in avoiding of the urine.

XXXIV. *Why do some men gape when they see other men gape?*

Because the nature of living creatures, and especially of such as want reason, hath a likenesse of consent and affections: and therefore when one asle pisseth, the others do stale likewise.

XXXV. *Why doth one which is blear-eyed, infect one which is whole; and yet he which is whole cannot heal the blear-eyed?*

Because the eyes are soft and moist, and exposed unto affections; also health receiveth an alteration of a small cause, and

sicknesse

sicknesse of a great and vehement : and that which is in a mean, is easier changed of that which is vehement, then contrariwise the vehement and great of the temperate and mean. And therefore blearnesse being a vehement and great disease, doth easily turn health, which is a temperate and moderate state of the body.

XXXVI. *Why do money and an apple seem greater in the water then they be ?*

Because the water doth deceive the sight, and the water about them maketh them seem of one colour. So the Sun, and the Moon, and the Planets, when they are seen neer unto the point of their rising or falling, seem to be of a greater bignesse then at other times : for they alter the air about them with their quality.

XXXVII. *Why, when a man doth give a blowe with a staff far off, see we the blowe presently, but we hear the sound after, although the sound, and the blowe go together.*

Because we have a sharper and quicker sight then hearing, and therefore the sight doth anticipate the stroke, and the hearing, which is grosser, doth hear the sound slowlier. And by the same reason we may resolve the doubt of thundering and lightning : for we see the lightning before we hear the thundering, although the thunder be first, or at the least together with the lightning : and yet the sight being more subtil then the hearing, doth see the lightning before the ear doth hear the thunder.

XXXVIII. *What is the reason, seeing we be both naked on our face, and clothed over all the body, yet we can endure cold better on our face then on our body ?*

Use is the cause of it.

XXXIX. *What is the reason that yellow choler, which all a mans life-time is contained in a place which is called the bladder of choler, doth not eat out the same bladder, seeing that it is subject to many alterations ; and yet if it fall into the tooth but a small time, which is a body which cannot easily suffer, it will presently eat it out ?*

Because nature hath so wrought, that it should onely remain in that body, and not hurt it. The name of nature is a greater remedy against grief, as by many examples it can be proved. The infant is in the womb of the mother nine months, and giveth

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giveth no grief of heart unto her : but if a light winde should breed there , it would presently cause a sharp disease. The rough artery is onely a receptacle of winde : but if a crum should go amisse in it, it causeth either choking , or a vehement cough : which could not be so, if nature had not so prescribed.

XL. *Why do some men go into a bath athirst, and come out without thirst ; and some contrariwise go in not athirst, and come out athirst ?*

Such as are dry do wax moist in the bath , and quench their thirst ; for thirst cometh of drynesse. But those which are moist and not thirsty, if they stay long in a hot air , are athirst , because their moisture is dissolved and spent with sweat.

XLI. *Why do some belch unfavourily after the eating of a raddish, and some not ?*

They whose stomack and belly doth not abound with naughty and superfluous humours tending unto flegme , they have a sweet breath : but they whose stomack doth abound, they have an unfavoury breath. A raddish is hor, and doth cut and attenuate the grossenesse of humours , and doth stir up a winde of the humours, the which it doth cast out by belching. So dirt which is not stirred, doth not savour at all ; but if it be stirred, it yeeldeth a strong stench. Those which think that a raddish is of a stinking quality of it self, because it doth stink out of the body if it be long kept , without doubt are deceived : for all men which eat of them should have unfavoury breath, if it were so.

XLII. *Why in very great cold do the fingers and superficial parts of the body wax black , and decay ?*

Because extreme cold doth drive in the natural heat into the body, and so the outward side of the body doth first grow wan, then black, and almost like a corpse. They do fall and decay, because that nature being intentive in the other parts of the body , doth joyn unto it self that which is hot , and doth drive away and cast out that which is decayed and naught. The superficial parts are altered , because they be not very fleshy, nor very hot : for in trees , those leaves fall soonest in the winter, which are least hot in nature, and therefore

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fore are weaker and thinner. Those which say that the natural heat doth presently in the beginning flee from the cold, as it were from an adversary, into the internal parts of the body, and then gather it self again, and strengthen it self, and as it were with a supply help those parts which are altered: and either because it was on a sudden, or because great store of heat doth run back again, and so burn the outermost parts of the body, because that staying there, is much of it gathered together: Those, I say, without all doubt, do think amisse, which say this.

XLIII. Why are such in great pain, which being very cold, do beat their fingers ends, or outermost parts of the body?

By reason of the sudden change of quality, much cold doth change into much heat. Whatsoever is suddenly done, doth bring grief to nature. Whatsoever is suddenly agreeing unto nature, doth delight nature: for mans body doth consist much in the manner of his disposition.

XLIV. Why do such as eat pepper, or great morsels of bread, yex?

There is a proportion in them with those things which do outwardly over-charge us, or cause us to have pain. Pepper and choler hath a proportion with thorns; but flegme and bread with a heaue stone. Such as have a stomach not full of superfluities, nor hot and sensible; they are quickly bitted with the sharpnesse of pepper: they do stir the stomach to avoid and cast out that which grieveth, and so do yex. But such as have a cold stomach, and full of flegme, and feel not so well, they do not yex so soon. The like hath happened unto them which swallow great gobbets of bread, the stomach is oppressed with the abundance and greatnesse of bread: and nature doth not suffer her parts to be idle when she feeleth any thing that doth hurt her, and therefore pepper with his biting quality, which hath a proportion with yellow choler, and bread with the weight of his quantity, and also abundance of flegme oppressing it within, do cause yexing.

XLV. Why do such pains as be in the nails, grievously torment us?

Because that the sinews which are in the fingers, with a peculiar kinde of superfluity do breed the nails, as the teeth are in the gummets; Therefore when the sensible vertue of the

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sinews goeth to the extreme parts, and is there gathered together, like water flowing into a valley ; without all doubt the greater the alteration is, the greater grief is felt.

XLVI. *Why doth a great deal of bread devoured hastily, by staying from breathing, drive away the yex ?*

Because that pressing the stomach, and driving into a narrow room, it causeth that the meat which is hardened in it, be pressed out into the belly ; and the stomach being discharged, doth stay the yex.

XLVII. *Why do such as yex give up yexing, when they hear of any sorrowful matter ?*

Because they are intentive upon that which sorrowful news brought, and therefore neglect to move their brest. And again, seeing we do then hold our breath, and so cause it to grow great in us, it doth stay the yex.

XLVIII. *Why do pictures, to those which are neer them, shew their colours plain ; and to those which stand afar off, shew some hollow, and some bending and hanging ?*

Because the force of seeing is dissolved and stretcht in a long distance, and therefore we cannot see exactly the skill of colours, but do see the white colours bending, and the black hollow. For white doth shine outwardly, and moveth it self unto that which is bright ; but black, as being dark, inwardly.

XLIX. *Why, if cold water be an enemy to the sinews, is not hot water a friend, and good, but yet that also is hurtful ?*

For if such a thing be hurtful, the contrary is profitable: for contraries cannot work the same way upon the same thing. But in truth, hot, as hot in its own nature, is not hurtful unto the sinews, but in that that it is hot and moist. Such as have their sinews hurt, the sinews, because they are quick of feeling, want much fastning and binding ; for they are dry of their own nature : but the moistnesse, which is contrary, doth mollifie them, and slacken them, and putrifie them. And so it is plain, that heat it self is not hurtful by nature. A draught of hot oil is good, because it hath a binding nature.

L. *Why, if apples be naught because they be cold and moist, is not water so too, being of the same quality ?*

Because that water is more subtil then apples, sooner purged,

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ged, and therefore it doth not hurt so much: yea, it doth sometimes strengthen the body.

LI. What is the reason that those things which have a hard concoction, and of a grosse humour, are more easily digested, as Beef, then those which are of an easier digestion, and not of so grosse a humour, as Fish?

Some attribute this unto custome: some think the cause to be in some secret hidden quality of nature. Some say that by reason of exceeding heat, those meats which are more digestive then is requisite, as being more mutable, are burnt and consumed through the great force of heat: and those meats which are not apt to digest, as being hard to be changed, seeing they be not much changed, are onely digested. So straw, as being apt to be altered, with great fire turneth into ashes presently: but the like is not in oak, which is orderly burned.

LII. Why are such as are sick and in pain, pale outwardly?

Because that nature, as we have said, doth penetrate even unto the heart, together with the blood. And it is the blood which doth heat the superficial parts, and make them thin and clear.

LIII. Why doth cold Wine grow in Egypt, which is a hot Countrey?

For the same reason. Again, the cold doth flee to the roots of the vines, and doth make them cold; for the vines are more apt then other trees to receive alteration.

LIV. Why doth hot water cast into a well, cause the water to be very cold?

Because the cold which is in the well, doth resist the heat; and because it is greater then the heat, it doth prosecute the heat by all means, and doth flow into the hot water very much, and so make it cold.

LV. Why when a small thing doth flie into our eyes, do we shut the other eye when we put it out?

Because that the spirit of seeing cannot go out by the eye which is shut; but gathering it self together, goeth with all abundance unto the eye which is open, and doth fill it, and make it swell outward, and so that is driven out and expelled that is in them.

LVI. Why do such as are buffeted see fire?

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Because that the spirit of seeing, being made thin and slender with the blowe, doth wax fiery ; and so going into the air, is seen as it is. The like doth happen when two stones, or two pieces of iron are stricken together : for the air between both is greatly rarified, and made thin, and becometh fire. The like also doth happen in the clouds.

LVII. *Why is not fire made by striking all stones ?*

Because some of them do yeeld too much, and are too light, and as it were full of holes. For, all striking of the air doth not make it thin alike ; and by reason of its lightnesse it doth flee, and enter into every passage : and therefore it is not all stricken at once, nor doth all wax fire. The like doth happen by striking of wood : and fire is made of the sun and water : for the broken beams of the sun against the glasse, do wax more and more fiery, and rebound upward again.

LVIII. *Why do such as itch desire hot things ?*

Because that flegme, thorow whose goodnesse and cold itching doth rise, doth dull the feeling of the skin.

LIX. *Why are they also glad of baths ?*

Because heat doth disperse the flegme, and the nails also do dissolve it.

LX. *Why do the shoulders itch much ?*

Because they are colder then the fore-parts, and therefore have more flegme in them. And that is the reason that old men, which are cold, are much troubled with the itch.

LXI. *Why is the coming down a ladder more easie then the going up ?*

Because then in descending, the weight of the body doth of his own nature move downward : in ascending the strength doth labour in lifting upward the weight of the body. So a stone is easier cast downward then upward : for that which is heaue, tendeth downward.

LXII. *Why do children cry when they are first born ?*

Because that nature and sense do as it were wander in a strange Country : for they come out of a warm soft body of the womb, into the cold air. And peradventure also they are afraid of the light.

LXIV. *Why do bees, emmets, and flies, and such creatures as are called Insecta, die in oil ?*

Because

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Because their breathing-hole is very narrow, which oil doth stop, and therefore they perish.

LXV. *Why doth flesh putrifie in the night under the full moon?*

Because then the air is hot and moist, which disposition doth especially further putrification: whereof it ariseth, that if the heat and moistnesse be small, concoction is wrought: if great, consuming: if heat prevail, then burning. The moon also hath four dispositions: the middle doth seem to be moist, and after a sort hot: the full, hot after a manner, and dry: in the wane, dry and cold: when she is without light, cold and dry; for then she wanteth the sun-beams.

LXVI. *Why are such pale as are in pain and grief?*

Because that nature remembring that which doth vex her, fleeth with the blood into the inward parts, which doth pain the skin: and it happeneth lesse unto those, then to such as fear.

LXVII. *Why are such red as are glad?*

Because nature doth meet that which delighteth, of her own accord, if it be without, as we do our friends and children. The blood doth follow nature, which dyeth the flesh with a red colour. Palenesse cometh by its contrary unto this.

LXVIII. *What is the reason that in a dead sleep in the night, when we open our eyes suddenly, we see light?*

Because that the force and spirit being gathered together in sleeping, and increased, doth rush out thorow the dark in great abundance; and being bright it self, doth see like unto the light.

LXIX. *Why do such as are ashamed cast down their eyes?*

Because the eyes are the glasse of the minde: for we see the affections of the minde by the eyes, as grief, anger, shame: because the minde cannot bear that which is not worthy of honour, for conscience sake it causeth the muscles of the eyes to be cast down, as it were hiding himself.

LXX. *Why can the ears endure all moistnesse, water excepted?*

Because that the water being cold, is presently carried unto the sinews of hearing; and all cold is hurtful unto the sinews. Again, Why before a great winde, are there as it were some running stars or lightnings going before, to foretel it, and especially in a dry and clear element? Because that it began

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to blowe before, and yet it appeared not unto us, because we have grosse thick bodies of hard senses. And therefore blowing the upper air, which is more thin, and pure, and heavenly, it doth convert into fire, and therefore we see some of its sparkles. When it hath gotten a greater force, it moveth this grosser air which is about the earth, and so is heard, and felt, and perceived.

LXXI. *Why cannot some see very great things asfar off, yet see things which are neer to them, although they be very small; as such as we call purblindes, because they see best winking?*

Truly I think that the force and spirit of seeing is very thin and pure, and therefore when it goeth far, is dissolved, and cannot reach unto the object which is seen. It doth scarce see things neer, by reason of its thinnesse and purenesse. There are some which see very small things asfar off, as certain old men: these contrariwise, because they have a thick spirit of seeing: and much it doth move, and reach a great distance off, and by that means is attenuated and made thin, and apt and fit to receive things visible. And so two contraries are dissolved.

LXXII. *Why are dogs onely, above all ether beasts, limed so together after they couple?*

Because the neck of the matrix hath a narrow passage, and the dogs yard doth swell in coupling, and the seed is cleaved in them, which happeneth unto them by reason of their drynesse. The drynesse doth straiten the parts, and moisture doth make them thick.

LXXIII. *Why are dogs onely mad in summer?*

By reason of their dry disposition, they are very dry by nature, and most of all in summer. And therefore when their humidity is heated and dry, they are set on fire, and so they are mad, like unto frantick men. And therefore their foam at the mouth is moist, dry, and venomous; or, it is manifest that it is inflamed either by often breathing, or by fiery eyes, or by gaping of their mouth, which they have always open to take air; or else because their tail groweth crooked with drynesse, and falleth away. They are most raging, which are most dry. Some say that the Canicular star, through its influence, doth cause them to go mad.

LXXIV.

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LXXIV. *Why are they lesſer grieved which become blinde on a ſudden againſt their will, then they which by election?*

Because that ſuch as on a ſudden ſuffer it, have their minde turned another way : but thoſe which by choice and election, have their minde wholly upon the thing which is cut, do know what they ſhall ſuffer, and therefore ſuffer greater torment.

LXXV. *Why do ſuch as carry burdens go ſinging?*

Because the reaſonable ſoul is delighted with muſick, and therefore turned unto it, doth feel the leſſe weight. And in like manner answer, when the queſtion is asked, Why in Funerals, bells, drums and flutes are uſed ; and why multitudes of men reſort unto ſuch as mourn, or be ſick, and uſe divers ſpeeches unto them : for the minde being occupied and intentive to the words, doth feel the grief leſſe, and therefore Comedies and Stage-plays were invented in times paſt, to withdraw the minde.

LXXVI. *Why do the Ethiopians for the moſt part die of an ague; and why are thoſe that are blear-eyed, ulcerated?*

They are moſt hot and dry ; and there is a kinde of reſolution of elements in them ; and that little moiſture which is in them being conſumed, it happeneth that the other elements are diſſolved. The heat goeth away for want of meat, the cold riſeth up through the abſence of heat. Dryneſſe doth raign through the conſumption of moiſtneſſe ; and for that cauſe dead carcaſes are cold and dry. And therefore Homer did know, that in dead bodies two elements did flee away, that is, the higheſt and thinneſt, and two remained : there went away fire and air, and there remained water and earth, that is, dryneſſe and coldneſſe. They are exulcerated and bliſtered in the blearneſſe of their eyes, becauſe that the blood is made full of choler, by inflammation, which doth eat the eyes with its ſharpeſſe.

LXXVII. *Why are ſuch always athiſt that have the dropſie?*

Because that that moiſture is ſalt, and paſſeth not away, but doth putrifie and dry the mouth of the ſtomack ; and they have ſmall Fevers withal. Further, look how much more the belly is puſſed up, ſo much the more the reſt of the body is drier, ſeeing it is not naturally nourished, and doth wax ſe-

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feebler and feebler : for much of the food turneth into water, and increaseth the disease.

LXXVIII. *Why do we in the beginning of a banquet, and before we be full, sit close, and before the end of the banquet we take more room, and think our selves pressed?*

Because that in the beginning all which sit desire, and have an appetite unto the meat, and therefore have an eye unto that which is on the table, and all do fall to it. But after they are well satisfied, one boweth one way, and another another, and have no care at all of that which is before them ; and by this means after meat we take more room.

LXXIX. *Why, in whatsoever place we have hairs, wax they gray, save under the arm pits?*

Because that place is hot, because it is thick of arteries, sinews and veins, and is also thin, and therefore doth always void the excrements of flegme, and therefore doth sweat always.

LXXX. *Wherefore if flegme be cold, and thick, and clammy, and likewise black choler cold and thick, but much lesse then flegme; yet a quartane ague is longer then a quotidian?*

Because that flegme, although it is cold, and much of it, yet it is moist; and moistnesse is easily altered and changed. Black choler, or melancholy, is cold and dry, and therefore is hardly altered and changed. They deceive therefore with the likeness of cold, and abundance of choler, and do hide some contrary quality. Furthermore, flegme is more agreeable unto nature then melancholy ; and therefore when a mans health doth perish with hunger, nature doth turn flegme into nouriture. And therefore when it is a quotidian ague, she turneth all the profitable flegme into nourishment ; and that which is unprofitable putrieth, and kindleth an ague.

LXXXI. *Seeing that there are four humours which do sometimes putrifie, wherefore are there onely but three agues, and not four?*

Because that blood naturally is a nutriment of the body : and when it doth abound, it causeth a repletion onely. If it be corrupted, it remaineth blood no longer : for being heated, it is not changed into yellow flegme. Therefore the other humours abounding, breed diseases, and especially about the skin, as serpentine ulcers, and cankers, two kinds of leprosie :

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and when they be corrupted, they breed agues.

LXXXII. *What is the reason that the external parts of the body of lovers, are sometimes cold, sometimes hot?*

Because that when they conceive any grief or dolour against their welbeloved, the natural heat passeth away with the blood into the internal parts of the body, whereof it cometh, that the outward parts are cold, and for the same cause they become pale and sad. But when they receive any good hope of their lover, or be greatly angry, then the heat with the blood goeth to the skin, and becometh hot and ruddy. And for the self-same cause, Painters do paint Love to be sometimes sad and quiet, sometimes fleeing and laughing, a very boy and childe, because that lust is vehement, but dureth not long. The affection in lawful friends is durable; as in fathers towards their children, and wives towards their husbands: but love doth not last. And it happeneth oft among such as are unknown the one to the other. The other disposition and affection is firm and stable: and immoderate love is vehement, and like unto a mad-man. They feign Love to be a fire-brand, and to have wings, because that the mindes of lovers are in suspence, and hang doubtfully, and are inconstant like birds: and then their heat burneth their heart with an incessant and vehement care of that which they love. He holdeth a sword in his right hand, and in his left a quiver with many arrows; because that in the beginning love doth arise from one beam and glance of the eye: for he doth see and desire at the same time: and as soon as he doth desire, the lover sendeth continual beams of the eye towards that which he loveth. And those beams are like unto arrows, because the lover doth dart them into the body. There are arrows in the quiver, because that those which love, send forth secret beams and glances of the eye. As the winde doth kindle the fire, so custom doth kindle love: for properly love doth not rise of custom: for if it were so, then of necessity custom should alway breed love; but the beginning of love is sudden. He is naked, because that desire happeneth without any mean: for no man loveth by another, nor privily, nor whom he knoweth not. And therefore Carvers do sometime carve Kings and gods naked for honours sake, there-

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by to shew that they have no hidden vice lurking in their breasts, but that their thoughts are open and sincere. Love is not one, but many, either because there are divers lovers of things (for they love not alike :) and *Plato* saith, that love is the beast with many heads ; or else because (as the same *Plato* saith) the same love falleth under many lovers. Love hath *Venus* for his mother ; that is, sensuality and lust : and by the image of *Venus*, they feign unlawful desire. Love is said to have been in love with *Erynnis*, a fury of hell, because that many have loved wickedly, and been in thrall to wicked affections ; as I have declared in my second book of Allegories, which I have made of their feigned stories.

LXXXIII. *Why do some die in a plague, and some not ?*

This proceedeth of their disposition of body : for if a man have a body full of evil humours, the air which is corrupted doth enter into, and corrupt that little good humour which is left in him ; and so all the humours being corrupted, he must needs perish. But if a man have not many superfluities, and doth abound with good humours, he is either not at all, or not much offended with the plague. That the disposition of the body is the cause of this effect, it doth appear by the example of external things. The oak is not easily subject to alteration, nor is not easily set on fire : Reeds and rushes are much more apt to receive fire, and straw more then they. But if you take wet straw, and green reeds, and very dry oak powdered over with brimstone, you make that fit to burn which is not fit. By this example you may resolve another question, How it cometh to passe that wearinesse doth rather breed a quotidian ague, then that which breedeth of putrification, or that which is called Habitual : for we say that this doth proceed from the disposition of the body ; for he had not any superfluous natural spirits or humours. All things which are found and solid, are dry : and the cause is the same, why the heat of the sun doth provoke sleep in some, and in other some not : for he in whom there is not much flegme, that being dispersed, doth moisten the head, and then he is in a sleep : but such as have a dry head, are kept more awake, because they are made more dry.

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LXXXIV. *Why doth the sun make a man black, and make dirt white ; and make wax soft, and the dirt hard ?*

By reason of the disposition of the substances which do suffer. All humours, flegme excepted, when they are heated above measure, do seem black about the skin : but dirt being full either of Salt-peter, or other salt liquor, when then the sun hath consumed its dregs and filth, doth become white. Again, when the sun hath drawn and stirred up the humidity of wax, it is softened : but in dirt the sun doth consume the humidity, which is very much, and so doth dry it, and make it hard.

LXXXV. *Why do such as are sick of the Jaundies go to siege ; and why is their excrement white ?*

Because that yellow choler is spread over all their bodies, as their eyes do shew, and their skin : for it doth not flow into the inward parts, as by nature it should, and by that reason their excrement is not coloured, nor doth not provoke them to the stool with its sharpnesse, which in the guts it should do. And therefore Physick imitating nature, as all other arts do, when the patient is in danger, doth help the part affected.

LXXXVI. *Why have such a very black skin for a time, which have a continual ague, after the time of judgement, which the Physicians do call Crisis.*

That doth happen through continual yellow choler, the which being burnt and adust by the rigour of the disease, is turned into black choler. And so in that time of judgement, being driven and repulsed by nature to the skin, it doth dye it. As also the skin is white in leprosies : that colour is hardly dissolved, by reason of the thicknesse of that humour.

LXXXVII. *Why doth black choler, coming unto the paps, or to the shank, work a corrosion, or gnawing or wasting ; and in those which are melancholy, it doth not work the like, although it flie into their brain ?*

Because there are many great veins in the paps, by reason of ingendering of milk, and therefore store of that humour doth run thither. And likewise unto the shank, because it goeth downward : but into the brain, because it is above, and also because it hath very small veins, small store of choler doth

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doth descend, and which hath onely power and force to prick, and not to gnaw and eat. Moreover, the brain is cold and moist, whereby it is after a sort contrary to the disposition of black choler, and doth mollifie it. That therefore which is properly called black choler, doth breed an eating and gnawing canker in the paps: in the shank, a bile, or sore hard to be cured, which of eating is called *Nomades*. In the brain it doth breed a mad fierce melancholy: but that which is not properly black choler, but a melancholy humour, causeth a swell onely, which is like a canker, but doth not gnaw and eat; and doth also breed a quiet and peaceable melancholy.

LXXXVII. *Why do those vessels which by the Greeks are called Bauralia (a kinde of a vessel or drinking-glasse with a narrow strait mouth) when they are filled with water, make a certain noise proper unto themselves, and thereupon have their names given them, as other feigned names of sounds, as in the water Phloesher, and such-like?*

Because that when such a vessel is without water, it is filled with air, which is a most thin body: and therefore when the water is on a sudden poured into it, with its heat it doth follow and beat out the air, which is thin, and exclude it utterly: for they cannot both stay in the glasse or vessel until it be full. For the Philosopher doth shew, that two bodies cannot at one time possesse and occupie the same place. And therefore when the air is on a sudden thrust upward thorow straits, a sound or noise is made of necessity, and that not one, but many, for then is as it were a fight betwixt both: for the water doth presse down the air, and the air listeth up the water: and although that be done successively, yet there is oftentimes a noise.

LXXXVIII. *What is the reason that when we put our fingers on the mouth of a watering garden-pot, the water will not run out at the bottom; and our fingers being taken away, it runneth presently?*

Because that when our finger is taken away from the mouth of the pot, the air entering in, doth thrust down the water, which of his own nature doth go downward, and so goeth out at the bottom. And this is the reason of all mechanical engines and instruments made by air and water, as clocks and hour-glasses made by water.

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LXXXIX, *Why doth wine and water given out of season unto the sick of an ague, cause a great distemperature of the brain. For these two are contrary; for the water is cold, and the wine hot?*

I say then, that the wine being apt to ascend, doth burn the brain at the time that it is disturbed and distempered with the ague. And we see also many which are in health, if they use much wine, to be scarce well in their wits. But water doth stop the passage of the body, by which the spirits (which are the instruments of the soul) are dissolved, and so cause them to become more thick and grosse, and more corrupt and putrified, which breedeth the ague. And oftentimes water being overcome by the ague, becometh its nourishment; as we see in a smiths forge, where a little water doth kindle the fire, and make it burn more.

XC. *Why have women, and children, and gelded men, shrill and loud voices?*

Because through abundance of humidity their artery is not stretched wide. And therefore as a small flute or pipe giveth a small slender sound; so the artery in them, which is strait and narrow: for it is the property of heat to make wide and loose, and women and eunuchs be cold.

XCI. *Why are children stricken with a planet in summer?*

They are sick of a weak and lingring ague, and their eyes sink hollow in their head, and they become weak and feeble, and sleep very little. And some of them have a flux, because children are tender, and easily suffer, and have great store of flegme in the head, as we have said. And therefore the flegme being over-much heated with great heats, and also putrified, doth enflame an ague; whereupon, the gristles of the brain are set on fire, and therefore they sleep little; and that fire descending by the arteries of the heart, and setting on fire the lively spirits, doth kindle an ague without putrification. And seeing that much choler ariseth of an ague, thereby it fallerth out, that the choler gnawing and eating the belly and guts, the flux or running of the belly ariseth. It is most plain, that the cause of that alteration is in the brain, because that cooling medicines are applied unto the head, and such as are good to quench that fire. And some of ripe yeers are sick of the same disease, that is, such as have flegme and

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and choler heaped in their head, which doth putrifie. By the very breathing thereof, and after a manner, by the fiery air, the spirits are set on fire.

XCII. *Why are round ulcers hard to be cured?*

Because they breed of sharp choler, which hath a force of eating and gnawing. And because it doth run dropping and gnawing, it doth make a round ulcer: and for that cause it requireth medicaments which dry and burn. And this the Physicians do speak. The natural Philosophers do say, it cometh to passe, because there is no beginning where the mischievous imposthume doth begin: for in a circle there is neither beginning nor end: and when they are burned by the Physitian, then they take another shape.

XCIII. *Why is honey sweet unto all men, and yet seemeth bitter unto such as have the jaundies?*

Because they have much bitter choler over all the body, and which aboundeth in the tongue. And therefore it happeneth when they do eat honey, that the humours are stirred: and the taste it self, when it hath felt the bitterness of choler, breedeth an imagination that the honey is bitter.

XCIV. *Why have very angry men fiery eyes?*

Because the blood about their heart is fervent, and the spirits hot: and therefore the spirits being very subtil and pure, are carried upward, and by the eyes, which are clear, they shine, and have bloody vapours ascending with them: and thereupon their face appeareth red: which Homer not being ignorant of, saith, *And his eyes were like a burning flame.*

XCV. *Why doth water cast upon serpents, cause them to flee?*

Because they are cold by nature, and dry, and have but little blood, and therefore they flee from excessive coldnesse. And that they be of this quality, it appeareth, because they seek for dens and secret places of the earth in winter, as being warm places; and at sun-set, they flee the air for the part, as cold: And again in summer, because the bowels of the earth are cold, they flee from them, and go into hot places.

XCVI. *Why doth an egge break if it be rested, and never break if it be sed in water?*

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Because that when its moistnesse cometh neer unto fire, it doth heat over-much, and is burned, and thereby doth breed much winde, the which through the straitnesse of the places doth seek a way out, and so breaking the shell, doth flie our. The like is in tubs and earthen vessels, when new wine doth boil in them. Also too much flegme doth break the shell of an egge in roasting; which doth also happen in earthen pots over-much heated and burned: and therefore the common people do wet an egge which they purpose to rost. Hot water, through its softnesse, doth separate the humidity by little and little, and doth dissolve it through the thinnesse and passages which are in the shell.

XC VII. *Why do men in the act of carnal copulation after a sort wink, and suffer such-like alteration in the other senses?*

Because they being overcome with the affect of that pleasure, they do comprehend it the better as it were winking with their eyes. They are not lifted up, nor do carry the minde abroad into the air with the senses, whereby they could lesse feel those corporal affections.

XC VIII. *Why have some medicines of one kinde contrary force, as experience doth teach: Mastick doth expel, dissolve, and also knit; Vinegar doth both cool and heat?*

Because there are some small indivisible bodies in them, not by confusion, but by interposition. As sand moistned, doth clog together, and seemeth to be but one substance or body, yet in truth there are many small bodies in the sand. If this be so, it is not absurd that contrary qualities and vertues should be hidden in Mastick in divers parts of it, and not confounded with it, because that nature hath given that law unto those bodies.

XC IX. *Why do the privy members swell when we hurt one of our toes?*

Because that nature providing for those things which belong to the body, doth speed to help those parts which are grieved: And because she hath the most profitable and nourishing of all the humours for her waggon, it is requisite when she doth descend unto the toe, together with the blood, that those veins be filled which are about the privie members,

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members, and those parts which are about those vessels which are called *Adenes* of the Greeks, which are little round kernels. Therefore an immoderate constipation doth cause inflammation and standing up: and that privie member is called *Inguen*, borrowing its denomination of the place it self.

C. Why hath not nature given birds a bladder for a receptacle for urine, and kidneys?

Because they did want much moisture to give matter for feathers to grow, and that also they do consume with the exercise of flying. Neither do they pisse at all: and when they drink, they avoid very moist dung.

CI. Why have children gravel breeding in their bladder, and old men in their kidneys and reins of the back?

Because children have strait passages in the kidneys: and an earthly and thick humour is thrust with violence by the uride from the kidneys, and from those receptacles which are made of the fashion of the Moon, even unto the bladder of the urine. The bladder hath wide conduits and passages, giveth room to the urine to go out, and also place to the humour, whereof the gravel is ingendered, to wax thick, and seat it self, as the custom of it is. But in old men it is contrary; for they have large and wide passages of the reins of the back and kidneys, whereof it cometh to passe that the urine may passe away, and the earthly humour congeal and sink down. The colour of the stone doth shew the humour whereof the stone doth arise.

CII. Why, if the stone do congeal and wax hard through heat (children are hot) and by the same reason it is done in cold men; for there is not so much cold to be granted, as there is ice or snow: for which extreme cold, the kidneys would perish; yet we do not use contrary things to dissolve coldnesse, but like things, that is, hot things, as Parsley, Fennel, and such-like.

They say then that it falleth out, that by exustion, parching and scorching, the stone doth crumble into small sand; as in earthen vessels, which when they are over-heated and roasted, they become sand. And by this means it falleth out, that small stones are voided, together with small sand, in making water. And sometimes it falleth out, that cold drinks do thrust out the stone, the kidneys being stretched, and cast-

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ing it out by a greater Lask, by vertue of easing the belly of his burden. And beside this it falleth out, that an immoderate heat of the kidneys or reins of the back, by reason whereof the stone doth grow, is quenched with coldnesse.

CIII. *Why is the curing of an ulcer or bile very hard, in the kidneys or bladder?*

Because that the urine being sharp, doth exulcerate the wound, which good and fit medicaments do cover and skin. Ulcers are harder to be cured in the bladder then in the kidneys, because urine doth stay in the bladder, and doth run away from the kidneys.

CIV. *What is the reason that in bathing-vessels, the hot water when it is stirred, doth seem more hot unto us, and almost burn our bodies?*

Because that when we go down into those baths, the water it self doth suffer, that is, when the water doth heat our bodies, the water after a sort is made cold by us. We have learned that whatsoever doth work in generation and corruption, the self-same without all doubt doth suffer. The water then being in some sort cooled, doth not heat alike; and we being accustomed unto it, do not feel the heat as we did in the beginning, because that the immoderate heat of it is diminished. If then stirring the hot water, more fiery hot water be added unto it, which neither hath yet wrought nor suffered any thing of the body which is in the water, that will seem very hot and scalding, in respect that working it doth also suffer, and by little and little doth lose his heat, as the first did.

CV. *How is it, if whatsoever be moved is the hotter for it, and especially in a hot air and place; yet when the air is beaten and stirred, it doth seem colder unto us, and especially in Summer, when the heat of the sun is most hot?*

For this doth seem contrary unto the other: for hot water did seem hotter unto us by moving, and here the hot air doth seem colder when it is stirred and moved. I say therefore that it is a common thing, that that which is most and principallest in any thing, either in quality or vertue, doth overcome and change that which is lesser and weaker; and that which is the stronger, doth somewhat suffer again in doing. Therefore the hot water, when it is very hot, sticking unto
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the hot body, is somewhat cooled, and doth not keep the same quality. The air then which doth compass us about, being hot in Summer, like unto the water, compassing our bodies, is heated somewhat by us, which are hot through the heat of the time of the year, and doth likewise again heat us: As linen garments do, the which being first cold, then being made hot by us, do then heat us again. When we do then stir the air, that air which was before heated by us, is driven away, and another which is not yet heated, doth succeed, which seemeth cold unto us.

CVI. *Why do those sores which breed in the ball of the eye, seem white, when they have left growing and are cold, and others do not seem such as grow out of the ball?*

Because that through the ball of the eye onely the spirit of seeing doth go out, the which is bright and clear. Therefore in the white of the eye, when the wound doth make thick the passage of the covering of the eyes, which is like a horn, the spirit of the sight cannot issue out: whereof it cometh to passe, that much of it being there gathered together, it doth make the wound light and clear, and shew the wound white. And because that by reason of the thickning of the sight, the spirit cannot go out, it falleth out they cannot see.

CVII. *Why do chaff and straw keep water hot, and snow cold, which are contrary in quality?*

Because the nature of chaff doth want a manifest quality, and is said of some to be without quality. Seeing therefore that of their own nature they can easily be mingled and consumed with that which they are next unto, they easily also take the same nature unto them. And therefore being put unto hot things, they are easily hot, and do heat again, and keep hot; and contrary, being made cold of the snow, and making the snow cold, do keep its coldness. So wax and oil will easily be consumed, and made one with another thing, and are also without quality, and do help the quality of that which is mingled with them, as being made one with them.

CVIII. *Why do the stars and heaven seem clearest in the bright winter-time?*

Because the air either which doth compass us, or that which is higher, is made thin, and purged with windes and
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showers of rain, and by that mean, our sight doth see both further and clearer. The like is manifestly seen in running rivers: for such things as are in them, are far better seen then in the thick puddle standing water, where either nothing is seen, or confusedly.

CIX. VVhy have we ofentimes a pain, and do quake in making water?

Because that sharp choler issuing out, and pricking the bladder of urine, doth provoke and stir up the whole body to ease the part offended, and to expel the humour moderately. This doth happen most of all unto children, because they have most excrements, by reason of their often filling.

CX. VVherefore are griefs greater in the night then in the day?

Because the minde being then idle and at rest with it self, is neither busied with the sight or hearing, nor occupied with any other sense, and doth nothing at all, nor is urged to any external action, and thereupon is much more touched with the feeling of any trouble or grief. It is very plain that the minde doth lesse feel the griefs of the body, when it is drawn abroad by external work, seeing that in sicknesse, and other like accidents, the company and familiarity of friends, and communication, and tales telling, do make their troubles and griefs more light and tolerable. Men have marked that nature doth least work by day, in digesting of meats, in altering of humours, making of blood, in growing, and such-like operations: But the minde is then most occupied in his action, as in the five Senses, the motions of the parts of the body, the imagination, in thought, in memory: and contrary in the night, then nature worketh most, and the minde least.

CXI. VVhy are not children, and especially infants, so easily shaken and put out of joynt as men?

By reason of their softnesse, yeelding unto the earth, they do dissolve its hardnesse, that can work no further. Men therefore having a hard body, because they do resist the hardnesse of the earth or stone, they do increase the vehemency of the blowe, and force the stones to work against themselves, as being hard themselves. And for the same reason a sponge yeelding is not broken: but glasse, an earthen pot, or any

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such other hard body is broken with a fall. And by this also we learn why a vehement blast of winde doth overthrow an Oak, and not a Reed, because that an Oak being hard and strong, and great, doth resist the winde, and so make its force more strong : but the Reed being light, and soft, and small, yeelding hither and thither to the winde, doth break its force. So a wrestler striving against his companion, doth increase his force, and yeelding sometimes, and bowing with him, doth sooner break his vehemency.

CXII. *Why do infants hearing their nurses singing, cease their crying, and sleep presently after ?*

Because that the substance of musick, as being a science (and all other arts) is ingrafted naturally in the minde, as heat is in the fire. As *Plato* doth say, our mindes do resemble sciences, and not learn them. And therefore the minde hearing such a song, in that that he doth remember, causeth the infant to be quiet; and in that that he taketh pleasure, it doth draw on sleep. For not being infected with the company of the body, he perceiveth those sciences very plainly ; and being somewhat drowned in the body, falleth into some oblivion of them.

CXIII. *Why do nurses rock and move children when they would draw them to sleep ?*

To the end that the humours being scattered by moving, may move the brains : but those of more yeers cannot endure this.

CXIV. *Why do some drunkards see double ?*

Because that the muscles of the sight being more or lesse filled, and by the self-same means weak and feeble, do draw and wrest one eye upward, and the other downward, and by that means the beams do not look one way at once, but towards divers places and bodies : and therefore each of the eyes using a private office and duty of seeing, doth cause a double sight.

CXV. *Why are boys apt to change their voice about fourteen yeers of age ?*

Because that then nature doth cause a great and sudden change of age. Experience proveth this to be true : for at that time we may see that womens paps do grow great, to hold and gather milk, and also those places which are about the hips,

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in which the young fruit should remain. Likewise mens breasts and shoulders, which then bear great and heavy burdens. Also their stones, in which the seed may increase and abide: and his privy member, to set out the seed with ease. Further, all the whole body is made bigger, and dilated, as the alteration and change of every part doth testifie; and the harshnesse of the voice, and hoarsenesse: for the rough artery or wind-pipe being made wide in the beginning, and the exterior and outward part within, unequal to the throat, the air going out at the rough, unequal and uneven pipe, doth become unequal and sharp, and after a sort hoarse; like unto the voice of a Goat, whereof it hath its name *Branchus*. The same doth happen unto them into whose rough artery any distillation doth flow. It happeneth by reason of the dropping humidity, that a light small skin filled unequally, causeth an uneven going forth of the spirit and air. Understand that the wind-pipe of Goats is such, by reason of abundance of humidity. The like doth happen unto all such as nature hath given a rough artery, as unto Cranes. After the yeer of fourteen they leave off that voice, because the artery is made wider, and receiveth his natural evennesse and equality.

CXVI. *Why doth oil, being drank, cause us to vomit, and especially yellow choler?*

Because that seeing it is light, and ascendeth upward, it provoketh the nutriment in the stomach, and lifteth it up; and so the stomach being grieved, summoneth the elective vertue to vomit, and especially choler, because that is light, and consisteth of subtil parts, and therefore is the sooner conveyed upward. And it is most plain that oil is light, and carried upward: for when it is mingled with any moist thing, it runneth unto the highest room.

CXVII. *Why doth not oil mingle with moist things?*

Because that being pliant, soft, and constipate in it self, it cannot be divided into parts, and so cannot be mingled. Neither if it be put upon the earth, can it quickly enter into it.

CXVIII. *Why is water and oil frozen in cold, wine and vinegar not?*

Because that oil being without all quality, and fit to be confounded with any thing, is cold quickly, and so extremely,

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ly, that it is most cold : Water being cold of nature, doth easily freeze, when it is made colder then its own nature. Wine being hot, and of subtil parts, is not so soon cold : but vinegar being of most subtil parts, suffereth no freezing.

CXIX. *Why do contrary things in quality, bring forth the same effects?*

That which is moist, is hardened and bound alike of heat and of cold : snow and liquor do freeze with cold : a plaister and gravel in the bladder, are made hard with heat. That is so indeed, but by a divers action. The heat doth consume and eat the abundance of moisture ; but the cold stopping and shutting with its over-much thicknesse, doth wring out the filthy humidity ; like as a sponge wrung with the hand doth cast out the water which it hath in the pores and small passages.

CXX. *Why doth a shaking or quivering cease oftentimes, when any fearful matter doth chance, as a great noise crack made with the sudden downfal of water, or a great tree?*

Because that oftentimes the humours being digested and consumed with time, and made thin and weak, all the heat vehemently, and suddenly, and sharply fleeing unto the inward parts of the body, consuming the humour which causeth the disease, doth dissolve it. Treacle hath this effect, and many such-like, which are hot and dry, when they are taken after concoction.

CXXI. *Why do such fall which turn round, if they be not used to do it?*

Because they do disturb the animal spirits which are in the brain, and toss them up and down together with humidities. They then be made lesse apt and fit to receive the sensible and motive power ; and do not suffer any action to go to the muscles and sinews : whereby it falleth out, that the weight of the body, as not being born up and supported by the soul, is thrown to the earth : and for this same cause they seek darknesse, because the spirit of seeing is disturbed & troubled, and cannot work like the other senses. But this doth not happen unto such as are accustomed to turn moderately, and by little and little custom doth breed this : for the soul and nature are not strangers the one to the other, but in time are as it

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were reconciled: for that which is done by little and little, and without intermission, is hidden from the sense: and after that it hath often escaped, falleth not as a strange thing unto nature, who was wont to receive it.

CXXII. *Why do steel glasses shine so clearly?*

Because they are lined on the inside with white lead, whose nature is shining; the which being put to the glasse, which is also shining, doth shine much more; and casting his beams thorow the passages of the glasse, doth double that which is in the superficial parts of the glasse, and without the body of the glasse, and by that means the glasse is very shining and clear.

CXXIII. *Why do we see our selves in glasses and clear water?*

Because that the quality of the sight passing unto bright bodies, by a reflection doth return again by the beams of the eyes, to the image of him who looketh on it. That qualities do go forth and passe from the face, as it is not absurd, they do shew, which remain neer unto trees, because they are wont to look green. For the green quality of green leaves passeth to the face of it self: likewise going unto the running water, doth make it shew green.

CXXIV. *Why do hard dens, and hollow places, and high places, send back the likenesse and sound of the voice?*

Because that such places also, by a reflection, do send back the image of a sound: for the voice doth beat the air, the air the place, the which the more it is beaten, the more it doth beat, and thereby doth cause the more vehement sound of the voice. Moist places, and as it were soft, yeelding unto the stroke, and dissolving it, give no sound again: for according unto the quality and quantity of the stroke, the quality and quantity of the voice is given, which is called an Echo. Some do idly fable that she is a goddesse: some say that *Pan* was in love with her, which without doubt is false. He was some wise man who did first desire and search out the cause of that voice: and as they which love, and cannot enjoy their love, are grieved; so in like manner was he very sorry until he found out the solution of that cause. As *Endymion* also, who first found out the course of the Moon, watching nights, and observing her course, and searching her motion, did sleep in the day-time. And therefore they do fable that he was belo-

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ved of the Moon, and that she came to him when he was asleep, because she did give unto the Philosophers the solution of the cause of her self. They say also that he was a shepherd, because that in deserts and high places he did mark the course of the Moon. And they gave him also the pipe, because that high places are blown with winde: or else because he sought out the consonancy of figures. *Prometheus* also being a wise man, sought out the cause of the star which is called the Eagle in the firmament, his nature and place: and when he was as it were wasted away with the desire of learning, then at the last he rested, when *Hercules* did dissolve unto him all doubts with his wisdom.

CXXV. *What is the reason that if you cast a stone into a standing water which is on the overmost parts of the earth, it makes many circles; and not if the water be deep in the earth?*

Because that the stone, with the vehemency of the cast, doth pursue and follow the water, from every part of it, until the stone come to the bottom. But if there be a very great vehemency in the throw, the circle is the greater, the stone going down unto the earth; and drawing down the water with it, causeth many circles. For first of all, it doth drive the overmost and superficial parts of the water into many parts, and so going down always unto the bottom, again dividing the water, it maketh another circle; and this is done successively, until the stone resteth. And because the vehemency of the stone is slackned still as he goeth down, of necessity the last circle is lesler then the first, because that with the stone, and also with the blowe, the water is divided.

CXXVI. *Why do some think that laughter proceedeth from the spleen, affirming that it is not like that they laugh not much, whose spleen is corrupted, as they whose spleen is sound, but say that such are very sad?*

Truely I think that the cause of laughter is incidentally, and not properly in the spleen: for if it be sound and perfect, it doth draw from the liver melancholy humour, whereof it proceedeth, that when the pure blood, without many dregs, doth go both thorowout all the body, and also into the brain, it doth delight both nature and the minde, and doth make men merry like unto wine, and bring men to a quietnesse and tran-

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quillity, and so of that laughter is moved.

CXXVII. *Why do not mules bring forth young ones?*

Because they do proceed of a divers kinde of beasts, and so then the mixtion of the seed differing in quality and quantity, begetting a certain other thing besides that which is first, doth mar and abolish the nature of those things which first were. As the mingling of white and black, abolishing the colour of extremes, breedeth another colour which is dark and dun, which is none at all of the extremes. Therefore the ingendering quality is abolished, and the aptnesse of receiving forms.

CXXVIII. *Why are such as deaf by nature, dumb?*

Because they cannot speak and expresse that which they never heard. Some Physitians do say, that there is one knitting and uniting of sinews belonging unto the like disposition. But such as are dumb by an accident, are not deaf at all; for then there riseth a local passion.

CXXIX. *Why are some stiff after meat, which were long fasting?*

Because they abound with choler, and so do heap up a sowre sharp humour. Therefore the parts of the body being nourished after meat, drive away from them the choler of the skin, and so that stiffness doth rise, that is choler gnawing and biting those parts, and stirring them up to pursue himself.

CXXX. *Why do not swine cry when they be carried with their snout downward?*

Because that above all other beasts, they bend more then other to the earth. They delight in filth, and that they seek, and therefore in that sudden change of their face, they be as it were strangers; and being amazed with so much light, keep that silence. Some say that their wind-pipe doth close together, by reason of the straitnesse of it, when they lie with their face upward.

CXXXI. *Why are swine delighted with dirt?*

As the Physitians do say, they are naturally delighted with it, because they have a great liver, in which desire is, as Aristotle saith, that the widenesse of his snout is the cause: for he hath smelling which doth dissolve it self, and as it were striving with stench.

CXXXII. *Why doth itching rise when an ulcer doth wax whole, and flegme cease?*

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Because the part which is healed and made sound, doth pursue the reliques of the humour, which remaineth there against nature, and which was the cause of the bile: and so going out thorow the skin, and dissolving it self, doth cause the itch.

CXXXIII. *Why are those diseases and accidents longest, and most grievous, which do molest one eye, and not both?*

For two causes: Because the running fluxion is heaped up at one eye onely: for whatsoever is divided into many, is weaker then it self, and of a lesser strength. Or else because that when the whole eye doth move it self in its actions, so oft it doth force the sick eye to move also; and the medicaments of every diseased part, doth consist in quietnesse.

CXXXIV. *Why doth a man sneeze more often and more vehemently then beasts?*

Because he doth use more meats and drinks, and of more divers sorts, and that more then is requisite; the which when he cannot digest as he would, it doth gather together much air and spirits, by reason of much humidity; the spirits being then very subtil, ascending unto the head, it forceth a man oft to avoid it, and so causeth sneezing. And it maketh a noise, because a vehement spirit or breath passeth thorow the conduits of the nostrils, as belching by the stomach, or a fart from the belly, the voice by the throat, and a sound by the ears.

CXXXV. *Why do dead mens hair and nails grow for a time?*

Because that the flesh rotting, withering, and falling away, that flesh which was hidden about the roots of the hair, doth now appear, and deceive, and cause an imagination that the hair did grow. And some say that it groweth in very deed, because the dead carcases are resolved in the beginning to many excrements and superfluities, by reason of the putrifaction which cometh unto them. These going out of the overmost parts of the body, by some passages and pores, do increase the growing of the hairs.

CXXXVI. *Why have children, rather then men, certain white spots in the nails of their fingers, rather then in their toes?*

Because they do breed of flegme, and children do abound with flegme more then men, because they are fatter, and great eaters. And the feet, by reason of walking and motion, do dissolve superfluities more then the hands; and therefore those

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those spots do not appear in the nails of the feet.

CXXXVII. *Why doth not the hair of the feet quickly grow gray?*

For the same reason, because that through great moving and walking, they do disperse and dissolve the superfluity of flegm, which doth breed graynesse. And the hair of the secret part doth grow gray very late, because of the heat of that place, and because that in carnal copulation it doth dissolve flegme also.

CXXXVIII. *Why do very many beasts wag their tails when they see their friends; and a lion and a bull beat their sides when they are angry?*

Because they have the narrow of the back reaching unto the tail, which hath the force of moving in it. The imagination acknowledging that which is known unto them, as it were with a hand, (as it doth happen in men) doth force them to move their tail; which doth manifestly shew some secret force to be within them, which doth acknowledge that which they ought. In the anger of lions and bulls, nature doth consent unto the minde, and doth enforce it to be greatly moved, as men do sometimes, when they are angry, beat their hands on other parts. When the minde cannot take revenge upon that which doth hurt, it doth presently seek out some other solace, and doth cure his affection with some stroke or blowe.

CXXXIX. *Why, if you do put dry burnt barley upon a horses fore, is the hair which grows upon the fore not white, but like the other hair?*

Because it hath the force of expelling, and doth wipe away and dissolve the excrement of the flegme, and all unprofitable operation which is gathered together through the weaknesse of the parts, or crudity of the fore.

CXL. *Why doth hair never grow in mens ulcers or biles?*

Because a man hath a thick skin, as it is seen by the softnesse and thicknesse of his hair. And seeing the scar is thicker then the skin it self, it doth stop up the passages by which the hair should grow. Horses have thinner skins, as it is seen by their thick hair, and therefore all passages are not stopped in their wounds and sores. And after that the excrement

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ments which were gathered together, have broken a passage thorow those small pores, the hair doth grow.

CXLI. *What is the reason that such as are bitten with a snake, being most exceeding athirst, do quench their thirst, and not increase it, by drinking of treacle, which is hot and dry?*

I say then, that it doth not quench the thirst by reason of his quality, but by some mutual sympathy and consent, and natural reason. This is a kinde of counter-poison and preservative, which is made of divers sorts of herbs which have some kinde of consent and agreement with all the parts of the body: as Dictamnium, Dedtander, or Ginger, hath a proportion conservative of the heart; Agrimony or Liver-wort, with the Liver; Stone-wort or Finger-fern, with the Spleen; Parsly with the mouth of the belly; Hyssop with the Lungs; Elicampagne with the reins of the back; Rue with the neck; Bitter-wort with the brain; and *Siler Montanum* with the bladder of urine. Every one of these drawn as it were with the sweetnesse of honey, doth draw that which is best for his safety. Amongst all which, the blood of some Viper is mingled, which hath a certain natural affection which we call *Antipathium*, a contrary of natural qualities, against every venomous beast and corruptible vertue. These being distributed into every part, they suffer not to work that effect which doth threaten corruption; for they do resist like unto lawful souldiers, who have taken arms for the defence of their country.

CXLII. *Why is Fortune painted with a double forehead, the one side bald, and the other hairy?*

The bald side signifieth adversity, and the hairy, prosperity, which we enjoy when it pleaseth her.

CXLIII. *Why have some commended flattery?*

Because flattery setteth forth before our eyes that which we ought to be, although not that which we be.

CXLIV. *Wherefore should Vertue be painted girded?*

To declare that vertuous men ought not to be slothful, but diligent, and always in action.

CXLV. *Why did the ancients say, That it was better to fall into the hands of a Raven then a flatterer?*

Because Ravens do not eat us until we be dead; but flatterers do devour us alive.

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CXLVI. *Why have cholerick men beards before others?*

Because they are hot, and their pores large and wide.

CXLVII. *Whereof doth it proceeded, that such as have the hicket, do ease themselves by retaining their breath?*

The breath retained, doth heat the interiour parts of the body, and the hicket proceedeth of nothing else but of cold.

CXLVIII. *Wherefore doth it proceed, that old men remember well that which they have seen and done in their youth, and do forget such things as they see and do in their rage?*

Things learned in youth, have already taken a certain root and habitude in the person: but things learned in age are forgotten, because the senses are weakened in them.

CXLIX. *What kinde of covetousnesse is best?*

The covetousnesse of time, when it is employed as it ought to be.

CL. *Why is our life compared to a stage-play?*

Because the dishonest do occupy the place of the honest, and the worst sort the room of the good.

CLI. *Why do Dolphins, when they appear above the water, signifie some storm and tempest to come?*

Because that at the beginning of the tempest, there do rise from the bottom of the sea certain hot exhalations and vapours which do heat the Dolphins, which doth cause them to mount to seek for cold.

CLII. *Wherefore are things more quiet in the night then in the day?*

The motion of the air and the coldnesse of the night is the cause thereof, which coldnesse doth stay, & hinder the motion.

CLIII. *Wherefore did the Romanes call Fabius Maximus the Target of the people, and Marcellus the Sword?*

Because the one gave himself to maintain the Commonwealth, and the other was eager and sharp to revenge the enemies of his Country. And yet they were but the Senate joyned together, because the gravity of one would moderate the courage and boldnesse of the other.

CLIV. *Why doth the shining of the Moon hurt the head?*

Because it moveth the humours of the brain, and cannot afterward resolve them.

CLV. *If water do not nourish, why do men drink it?*

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Water causeth the nutriment to spread thorowout all the body.

CLVI. Why is sneezing good?

To purge the brain, as the milt is purged by the cough.

CLVII. What is the seat of the affections of the body?

Joy dwelleth in the spleen, anger in the gall, fear in the heart, lechery in the liver.

CLVIII. Why is sodden water better then cold?

Boiled or sodden water hath lesse ventosity, and is more light and subtil, because the earthily and heavie substance is separated from it.

CLIX. Wherefore are the waters of marishes and ponds evil?

Because they are flegmatick, and do corrupt in summer time, because the finest of the water is converted into vapours, and the earthinesse doth remain.

CLX. Why be studious and learned men soonest bald?

It proceedeth of the weaknesse of the spirit, or because want of digestion causeth flegme to abound in them.

CLXI. Why doth too long watching make the brain feeble?

Because it doth multiply choler, the which by that means doth dry and extenuate us.

CLXII. Why be steel glasses better for the sight then other glasses?

Because steel is harder, and doth represent unto us more substantially the air which receiveth the light.

CLXIII. Whether doth love shew his greatest force, either in making the fool to become wise, or the wise to become a fool?

In giving wisdom to him who hath it not; because it is more hard to build then to pull down, because that ordinarily love and folly are but an alienation of the minde.

CLXIV. Why is over great labour naught for the sight?

Because it drieth the blood too much.

CLXV. Why is goats milk accounted best for the stomach?

Because it is thick, and not slimy, because they feed on boughs and wood, rather then on grasse.

CLXVI. Why doth much grief and vexation bring age?

Because it drieth, and age is nothing else but a drought.

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CLXVII. Why is he most merry, who hath the thickest blood?

The blood which is fat and thick, maketh the spirits firm and constant, wherein consisteth the force of all creatures.

CLXVIII. In your opinion, which is hardest, to obtain the love of one, or to keep it being obtained?

To keep and maintain it being gotten, by reason of the inconstancy of women, which are quickly angry, and soon weary of one; lightly found, and slippery to keep.

CLXIX. Why do serpents flie from the herb called Rue?

Because a serpent is cold, dry, and full of sinews, and the herb Rue of a contrary nature.

CLXX. Why is a capon better to be eaten then a cock?

The capon loseth not his moistnesse, because he treadeth not the hens as the cock doth, and therefore it is better.

CLXXI. Why do we smell a thing lesser in the winter-time then in the summer?

Because the air is thicker, and lesse moveable.

CLXXII. Why doth hair burn so quickly?

Because it is dry and cold.

CLXXIII. Why is love compared to a Labyrinth?

Because the entry and coming in is easie, and the going out impossible, or very hard.

FINIS.
